



*Ontario Study
of the Relevance
of Education,
and the Issue
of Dropouts*

88-05376/

Ontario Study
of the
RELEVANCE OF EDUCATION
and
THE ISSUE OF DROPOUTS



November 30, 1987

The Honourable Chris Ward,
Minister of Education,
Government of Ontario,
Queen's Park,
Toronto

Dear Mr. Ward:

In March, 1987, I was appointed to undertake a policy study in the field of education, and to report my findings to the Minister of Education within a year.

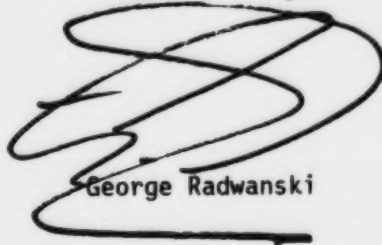
My mandate has been the following:

To identify and recommend ways of ensuring that Ontario's system of education is, and is perceived to be, fully relevant to the needs of young people, and to the realities of the labour market they are preparing to enter, with particular emphasis on the issue of high school dropouts.

Because so many thousands of children and young people are affected each year by the policies and approaches under examination here, it has appeared appropriate to carry out the work of this study with a very considerable sense of urgency.

I am pleased to submit this final report, and I wish to express my appreciation for having been entrusted with the opportunity to explore issues vital to Ontario's future.

Yours sincerely,

A stylized, handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke at the bottom.

George Radwanski



Acknowledgements

This report was made possible by the help and efforts of a study team, small in number but prodigious in energy and commitment, who performed work of consistently high quality under unceasing time pressures. I am deeply grateful for their assistance.

Ann C. Jamieson ably served as Research Director/Executive Assistant. Bruce Cox, seconded to the study from the position of principal of C.W. Jefferys Secondary School in North York, provided invaluable policy analysis and advice. Shirley Le Claire carried out the secretarial and administrative tasks of the study with unfailing graciousness and efficiency.

I also want to particularly thank all the staff of the Ministry of Education who were so helpful in the course of our work; very special appreciation is due in that regard to the staff of the ministry's library. As well, the staff of the statistics unit of the Ministry of Treasury and Economics were generous with their assistance regarding both data and coping with computer technology.

A great many other people within and outside the Government, too numerous to mention here individually, contributed to the work of this study with insights, ideas and cooperation. They all have my thanks.



TABLE OF CONTENTS

INTRODUCTION	<u>Page</u> 1
PART ONE: REDISCOVERING A PHILOSOPHY OF EDUCATION	7
I. Overview	7
II. The Vital Role of Education	11
III. The Content of Education	25
PART TWO: UNDERSTANDING THE ISSUE OF DROPOUTS	65
I. Overview	65
II. The Dimensions of the Problem	67
III. Who Drops Out	71
IV. Causes of Dropping Out	86
V. Educational Aftermath of Dropping Out	100
VI. Policy Responses to the Dropout Rate	101
PART THREE: REAFFIRMING OUR SENSE OF PURPOSE	121
I. Overview	121
II. The Pre-school years	123
III. The Elementary Schools	127
IV. The High Schools	152
V. Education and Society	182
CONCLUSION: REASSERTING THE RELEVANCE OF EDUCATION	185
SUMMARY OF POLICY OBSERVATIONS	189
SUMMARY OF RECOMMENDATIONS	195
ENDNOTES	203



INTRODUCTION

We have not had a major, clearly focussed debate on the aims and objectives of education in Ontario since the days of the Hall-Dennis Report, published in 1968.

After spending the better part of a year examining the state of elementary and secondary education in this province, I am convinced that such a debate is now needed urgently, even desperately.

This is not because our education system has necessarily deteriorated. Taking into account the many and varied expectations it is called upon to fulfil, it may well be better overall than at any time in our past. But it still is not good enough - not clear enough in purpose, not effective enough in teaching, not successful enough in student outcomes - to meet the imperatives of the present, let alone the complex challenges of the future.

My strongest impression from the work of this study is that, in terms of educational philosophy, the system has increasingly been running on empty. Educators and education officials know that the premises and priorities set out in the Hall-Dennis Report 20 years ago have been overtaken by contemporary reality, but no coherent new strategy has been agreed upon to take their place. Instead, there is drift, in the form of an endless succession of improvisations, half-measures and compromises to bridge the gap between competing views.

We live in a very different world from the one that existed - or, at least, was thought to exist - two decades ago when the Hall-Dennis Report lyrically

pronounced that "the underlying aim of education is to further man's unending search for truth" and prescribed a system in which "what confronts the learner will not be exclusively or mainly subject matter prearranged to meet requirements of adult logic, but opportunities to pursue with zest what he can appreciate for its interest and value in the vibrant world of today."

That report faithfully mirrored the flower-child, do-your-own-thing outlook of the 1960s in its belief that a relevant education was one in which content was of secondary importance, that the acquisition of specific knowledge should be subordinated to more abstract goals of individual self-fulfillment and self-esteem.

But relevance is a moving target. Whether or not that view was ever valid, today it is dangerously outdated. We have no choice but to recognize that we live in an era when the prosperity of societies and the well-being of individuals will increasingly depend on the possession not merely of various affective attributes but of specific, identifiable knowledge and skills.

My previous work for the Ontario Government in carrying out the Ontario Study of the Service Sector has left me convinced that this province - like Canada as a whole, the U.S., and more than a dozen other advanced industrialized countries - is in the midst of a socio-economic transformation every bit as fundamental as the earlier shift from the agrarian to the industrial eras. This transformation may broadly be characterized as a shift in economic predominance from the production of goods to the provision of services, and from exploitation of material resources to reliance on human knowledge.

In this new economic environment, our young people will not long feel fulfilled, nor will their self-esteem long endure, if they find themselves unemployable or unqualified for other than the most menial, dead-end work because they lack the requisite knowledge or skills. And our collective sense of fulfillment and self-esteem as a society will scarcely be enhanced if our standard of living goes into steady decline because an under-educated population has made us uncompetitive in an increasingly rigorous global economy.

It is imperative that the pursuit of ways to improve our system of education not turn into an exercise in assigning blame or seeking scapegoats for various deficiencies in the status quo; that would be as unfair as it would be counterproductive. I have been struck throughout the work of this study by the high degree of commitment and concern demonstrated by teachers, guidance counsellors, principals, supervisory officers, trustees and Ministry of Education officials. The findings and recommendations of this report therefore proceed from the premise that everyone involved is genuinely dedicated to the provision of high-quality education.

At the same time, it may be appropriate to reaffirm here, as a fundamental premise, that the system of education does not exist for the convenience nor even the employment of teachers, for the aspirations of various unions or federations, nor for the preference of education officials for avoiding tensions with various powerful pressure groups. Our elementary and high schools exist for the sole purpose of providing the best possible education for our young people, and that purpose alone should provide the final criterion by which possible options for further improvement are assessed.

This report is unavoidably vulnerable to the criticism that it does not come from a professional educator. Indeed, there is cause for considerable diffidence and humility in finding oneself called upon to offer analysis and recommendations in a field to which so many highly qualified people have devoted their entire careers. I draw some reassurance, however, from a belief that education ultimately belongs not to educators but to the community at large, and that there may be benefits in the perspective of an outsider unburdened by adherence to any of the philosophical camps or methodological schools of thought into which the educational community is divided.

I have, in any event, sought to compensate for my own deficiencies by soliciting expert advice from every available quarter. In addition to an extensive review of the relevant Canadian and foreign literature and to detailed analysis and development of quantitative data, the work of this study has included discussions with leading educational experts here and in the U.S.; with teachers, principals, guidance counsellors, trustees, students and parents; with representatives of various professional organizations in the field of education; and with officials in the Ministry of Education.

In the interests of producing a report suitable for broad circulation as a basis for public debate, I have opted in its writing for brevity rather than for the extensive elaboration a more academically-oriented document would require, and for broad policy brush-strokes rather than fine prescriptive detail in the presentation of some of the recommendations. Various supporting and background materials are being made available to the Ministry of Education under separate cover.

While the recommendations in this report are being presented with a very considerable sense of urgency, it is also important to recognize that they could not and should not all be implemented at once. It would be profoundly unfair to the students already in high school, for instance, to suddenly subject them to drastically changed requirements and approaches for which they have not been adequately prepared in their earlier schooling.

Some of the recommendations therefore obviously would require a certain sequencing or incrementalism in their implementation. What there should not be, however, is incrementalism in decision-making as to what is to be implemented over time. That would only perpetuate the drift, uncertainty and proliferation of piecemeal changes that are among the greatest weaknesses of our current system.

What we need, rather, is a clear and explicitly-stated policy for the renewal and strengthening of our system of education over the years ahead, and a timetable for its implementation. What follows is presented in the hope that it may contribute to the development of such a policy.



PART ONE:
REDISCOVERING A PHILOSOPHY OF EDUCATION

I. OVERVIEW

In an era when the prosperity of our society and the well-being of individuals will increasingly depend on having a highly-educated population, approximately one out of every three young people in Ontario drops out of high school before having completed Grade 12.

Uncounted others are "psychological dropouts" who drift aimlessly through the system eking out the minimum requirements for a diploma, then enter adult life still deficient in the knowledge, skills and attitudes needed to function effectively in today's complex and demanding society.

In fact, taking into account both the dropout problem and the very serious deficiencies of the "basic" and "general" streams of study, it may very well be that only the 52 per cent of young people who successfully complete the "advanced" stream are getting anything approaching an adequate high school education.

The overt dropout rate alone of 30 to 33 per cent appears startling, even shameful, in a society that purports to understand the importance of education. We intuitively sense that the figure represents a tragic waste of opportunities for individuals and for the community.

And yet the dropout rate is only the most visible manifestation, the symptom, of broader issues that require attention. If fully one-third of the client group for something as vital as education, in a society as education-conscious as ours, is sampling the product and walking away from it in dissatisfaction, the right strategic question isn't "What's wrong with the clients - how can we get them to stay?". It's "What's wrong with the product - how can it be improved?"

The question is timely, because the education system in Ontario is currently suffering from a profound uncertainty of purpose. Buffeted by competing, often conflicting, expectations and demands, our schools and our educational policy-makers have been struggling to accomodate all the pressures with a seemingly endless succession of adjustments and compromises.

It cannot even be taken for granted that everyone will agree that the statistical dropout rate suffices to conclusively demonstrate the existence of a problem requiring the intervention of public policy; the meaning we attach to the statistic depends entirely on the goals we choose for our system of education. But those goals are not at present clearly articulated.

If we are satisfied with an objective of merely ensuring that every young person has the opportunity to obtain as much secondary schooling as he or she wants, then a completion rate of some 67 per cent does not necessarily signify any systemic shortcomings. Indeed, it compares favorably with the past: As recently as the 1950s, only some 40 per cent of young people in Ontario were completing Grade 12.¹ We can, in this view, regret that a third of our young people still lack the motivation or the aptitude to broaden their educational

horizons - and then get on with focussing our energies on educating the willing.

But if the objective is to have all but the most intellectually or developmentally deprived of our young people obtain at least a high school education before entering adult life, then a dropout rate of more than 30 per cent can only be seen as a shocking and unacceptable shortfall requiring urgent remedial action.

Which, then, is our goal?

The signals have until now been mixed. On one hand, academic, business and political leaders extol the great and growing importance of education. On the other, Ontario law says that students may freely leave school at 16 - an age at which most cannot have proceeded further than Grade 10. Many teachers suggest that students who lack motivation or aptitude would do better to leave and get a job.² And, in fact, only a minority of recent Ontario dropouts report that school personnel made any major effort to dissuade them when they discussed thoughts of dropping out.³

There have recently been clear indications, including the appointment of this study, that the Government of Ontario does not regard the current dropout rate as acceptable. Premier David Peterson stated in a March, 1987, speech that the dropout situation throws into question "the efficiency of a system that is not serving young people."⁴ A unit has been established within the Ministry of Education to coordinate student retention efforts. And the April 28, 1987, Speech from the Throne included an undertaking to reduce the dropout rate by one-third within the next five years. These are important steps forward.

But to approach the issue solely in terms of setting numerical targets and looking for ways to keep young people in school until graduation, would surely be to miss the point. Even if all our young people were to stay in school not only for 12 but for 20 years, we would nevertheless produce a generation of under-educated ignoramuses if that time were spent on ineffectual or irrelevant pursuits.

Consequently, developing a solid long-term strategy requires first that far more fundamental questions be addressed:

- Do we want all young people to continue in high school at least until they complete Grade 12?

- If so, why? What is it we want them to learn? And are they indeed likely to have learned it if they do stay until graduation?

Unless Ontario society can develop a consensus around these issues which go to the very heart of educational policy - unless, that is, strategy can be based on a clearly articulated and understood philosophy of education - focussing on dropouts would be as futile as pondering how to keep everybody aboard a vehicle without first being able to agree on the vehicle's destination.

II. THE VITAL ROLE OF EDUCATION

1.) Education and the Economy

While the education system has not changed all that dramatically in recent years, what has changed is the degree to which we must rely on it for our very survival as an economically competitive society.

Education has long been recognized as an important contributor to economic growth, of course - but now it has become the paramount ingredient for competitive success in the world economy.

In the new internationalized global economy, goods can be produced wherever production costs are lowest and then readily transported to markets anywhere in the world. Similarly, sophisticated service activity - for instance, architectural draftsmanship, engineering design, data processing or computer software development - can be carried out virtually anywhere and transmitted to clients via telecommunications and computer link-ups.

Since capital and technology can be deployed anywhere in the world, the key competitive variable is now the quality of the work force - that is, the level of knowledge, skills, adaptability, ingenuity and motivation possessed by the people in any given society.

As the Ontario Study of the Service Sector put it: "To compete effectively in a new knowledge-intensive global economy that relies primarily on human capital, excellence in educating our work force is our single most important strategic weapon. Education is as vitally fundamental an element of public infrastructure in the new knowledge-based economy as roads, railways, ports and

power sources were in the previous predominantly manufacturing-oriented one. An economically advanced society's ability to compete will depend increasingly on having sufficient world-class experts to provide innovation and leadership, and a general work force with the skills and flexibility to carry out sophisticated and rapidly-changing tasks."⁵

It is easy enough to understand why this has become the case.

In our previous manufacturing-oriented economy, knowledge was to a large extent replaced by machinery. Mass production of goods relied heavily on the development of machines which could be operated by large numbers of relatively-unskilled workers each of whom was trained to carry out a single repetitive task.

Now the global diffusion of technology has brought such machines, increasingly sophisticated in capacity and flexibility, into widespread use in the newly-industrializing countries. These countries have access not only to comparatively cheap raw materials, but also to an abundance of low-skilled workers - no less effective than ours - who are willing to work far longer hours for far lower wages than their counterparts in economically advanced economies like Ontario's.

The result in an increasingly internationalized economy is that Ontario - like Canada as a whole, the U.S., and virtually every other advanced industrialized society - can no longer hope to compete effectively in the mass production of standardized goods requiring relatively unskilled labor. Our only potential for long-term competitive advantage lies, rather, in knowledge-intensive service activity and in those highly

sophisticated and specialized manufacturing activities that require an expert and flexible work force.

The challenge we face in this regard is precisely the same as the one spelled out for the U.S. by the Carnegie Forum on Education and the Economy in a 1986 report: "If America wants to compete on the same terms as it did in the past - making the most of the workers with low skill levels - then it must accept prevailing world wage levels for low-skilled and semi-skilled labor. That is, we must be prepared for a massive decline in our standard of living. The alternative is to revise our view of the role of the worker in the economy. In the future, high-wage level societies will be those whose economies are based on the use of very highly skilled workers, backed up by the most advanced technologies available...It is no exaggeration to suggest that America must now provide to the many the same quality of education presently reserved for the fortunate few. The cost of not doing so will be a steady erosion in the American standard of living."⁶

A skilled work force, in this context, does not mean one whose members merely have been trained in the exercise of certain specialized, job-specific skills. The prerequisite is a high level, and quality, of general education.

As A.R. Dobell, President of the Institute for Research on Public Policy, has pointed out: "It is simply not possible to predict what kind of skills will be needed in the work force even five years from now. Consequently, a worker with mechanical training in specific skills is bound to be in a far less advantageous position than one who has learned how to study, think independently and learn quickly."⁷

The same priority is emphasized by the Economic Council of Canada in a 1987 policy statement on technology and jobs: "Education is a cornerstone. Its importance in a high-technology world cannot be ignored because the accelerating pace of change will lead to rapid obsolescence of skills. The education system therefore faces a profound challenge. It must prepare individuals to be mobile, flexible, adaptable and versatile. The ability to learn will be the premium skill of the future."⁸

Vital as this educational imperative is in itself, it is made all the more urgent by the fact that our closest competitors in the advanced industrialized countries, notably including the U.S., are also focussing on the issue. To lag behind in our response would also inevitably be, over time, to lag behind in our competitiveness.

As the U.S. National Commission on Excellence in Education said in its much-publicized 1983 report, *A Nation At Risk*: "Knowledge, learning, information and skilled intelligence are the new raw materials of international commerce and are today spreading throughout the world as vigorously as miracle drugs, synthetic fertilizers, and blue jeans did earlier. If only to keep and improve on the slim competitive edge we still retain in world markets, we must dedicate ourselves to the reform of our educational system for the benefit of all - old and young alike, affluent and poor, majority and minority. Learning is the indispensable investment required for success in the 'information age' we are entering."⁹

2.) Education and Individuals

a.) Changing Labor Market Requirements

At the same time that education has become the key to competitive success for societies, it has also become the key to successful employability for individuals.

While educational attainment has always conferred advantages, low levels of education or lack of specific skills did not in the past preclude people from obtaining steady, reasonably well-paid employment. Virtually anyone was employable if he or she was willing to make the effort to work. In fact, it was not uncommon for bright, highly motivated people with very little formal education to start at the bottom in a given occupation and work their way up to very senior positions, even to the presidency of large corporations.

Today, that is no longer the case.

The career ladder has been truncated, and young people who start at the bottom with inadequate education and few skills will at best stay at the bottom, in low-paid, dead-end jobs. More likely, they will increasingly become altogether unemployable, as those marginal jobs steadily dwindle in number.

This is due to the combined effect of at least three factors: the internationalization of production; the spread of computerization and robotics; and the shift from manufacturing to service activity.

The internationalization of production, described above, means that low-skilled manufacturing jobs are inexorably disappearing from our economy and being transferred to countries with much lower wage rates.

As the Centre for Educational Research and Innovation, at the Organization of Economic Co-operation and Development (OECD), puts it: "Because the exports of goods and services from developed countries to less developed ones are based on labour with a high technical or educational component, and their imports of goods from less developed countries are based on labour with a lower technical or educational component, an increase in the volume of international trade means that the demand for domestic low-skilled entry-level labour continually declines in developed countries...Youth, who are in competition with adult workers in their own society paid at about the same level, now find themselves in competition with workers in another country paid at a much lower level."¹⁰

At the same time, the whole logic of the new technologies is to replace unskilled or unintelligent human labor with the output of computers and robots. Computerization does not, contrary to widespread belief, reduce the need for skills and make it possible for unskilled, under-educated workers to earn a living by learning to push a few buttons; rather, it makes such workers redundant.

As automated machinery becomes increasingly capable of carrying out routine tasks - not only in factories but also in offices, banks, fast-food outlets and a virtually endless variety of other businesses - it is worthwhile to pay people to do only what the machines cannot. This involves such tasks as diagnosing what is

wrong when the machinery fails to perform satisfactorily, problem-solving and innovating in areas that fall outside the routine, dealing with people, and so on. Because each worker's range of responsibility and decision-making is therefore broadened, knowledge and skills - and, hence, education - become indispensable to employability.

A major study published by Columbia University's Conservation of Human Resources sums it up this way: "Upskilling comes about for three principal reasons: First, the most efficient use of the new technology often seems to lead to a reintegration of tasks previously parcelled out among different workers. Second, as intelligent systems take over 'processing' functions, workers are left with 'diagnosis' and 'problem-solving' functions. And third, the shift to 'problem-solving' functions at the low levels of the organization calls for a simultaneous decentralization in decision-making power."¹¹

In addition to the effects of automation and of global competition, the availability of jobs for the under-educated is also being steadily reduced by the shift to an economy in which the service sector is by far the largest component. The service sector, which comprises all economic activity other than the primary industries and manufacturing, already accounts for 73 per cent of employment and 70.2 per cent of Gross Domestic Product in Ontario - and 80 per cent of all new jobs are being created in that sector.¹²

While the service sector does provide a large number of jobs for the unskilled and the under-educated in such industries as food services and retailing, those jobs tend to be low-paid, frequently part-time, and impermanent - and their number will be steadily reduced by various kinds of automation. By far the greatest

employment growth over the past four decades has been in the more sophisticated services: finance, insurance, real estate, services to business management, health care and education. In all these fields, employability is closely and increasingly tied to education.¹³

To cite just one example, a 1986 study of financial service firms in five countries (France, Germany, Japan, Sweden and the U.S.) conducted for the OECD's Centre for Educational Research and Innovation found "a broad tendency toward the elimination of low-skilled work associated with data entry, the filing of forms, the forwarding of files, and similar activities."¹⁴

While lower-tier jobs in financial services are rapidly disappearing, the study reported, "our investigations indicate an unmistakable rise in the hiring requirements, increasingly to a two-year college level (two years after high school), or equivalent, for middle-tier workers and to a four-year college level for upper-tier workers...Today firms are emphasizing the hiring of workers at much higher levels of formal education preparation and are attempting to refocus much of their firm-based training on those skills which are primarily specific to the firm."¹⁵

Despite the mounting evidence about the vital link between education and employability, some people still believe that the situation is being over-stated. Indeed, when one looks at all the unskilled work that still exists in our economy, it may be tempting to believe that there will always be large numbers of jobs that don't require much knowledge or brainpower.

What we need to remember, however, is that the full effects of automation, globalization of trade, and

the growing importance of the service sector are only beginning to be felt - and the young Ontarians who start Grade 1 next fall will still be in the potential labor force in the year 2040.

b.) Current Income and Employability Effects

While education will become progressively more important in the future, there already is ample evidence in today's economy of a direct link between the employability and earning power of individuals and the level of education they have attained.

According to 1981 census data, the average annual wages of male high school dropouts aged 20-24 were \$10,358, compared to \$11,181 for high school graduates in the same age group - a difference of \$823. For females, average wages were \$6,521 for dropouts and \$7,755 for graduates - a difference of \$1,234.¹⁶

By age 25-29, the gap had widened. Average wages for male dropouts were \$14,354, compared to \$16,988 for graduates - a difference of \$2,634. Among females, the average for dropouts was \$7,415, compared to \$9,304 for graduates - a difference of \$1,889.

This pattern remained consistent in the older age groups. Past the age of 30, there was also a dramatic gap in average wages between high school and university graduates.

In the 35-39 age group, for instance, male dropouts earned \$19,116, high school graduates earned \$21,714, and university graduates earned \$30,103. For females, the comparable averages were \$8,347 for dropouts, \$10,038 for high school graduates, and \$16,935 for university graduates.

More recent data confirm the continued existence of a substantial income gap between dropouts and non-dropouts, and suggest that it may already be widening. An extensive survey of 700 Ontario high school graduates and 700 high school dropouts between the ages of 18 and 30, carried out for this study by Decima Research, found that the average annual income was \$15,720 for dropouts and \$19,490 for graduates - a difference of \$3,770.¹⁷

But the level of education they have attained does not only affect what people can expect to earn in the work place. It also has direct impact on their ability to find and keep employment at all.

The survey of dropouts and graduates carried out by Decima Research found that 49 per cent of the dropouts have been unemployed at some time in the past, compared to only 38 per cent of those who completed high school. Dropouts were also found to have spent, on average, nearly twice as much time unemployed over the past five years as graduates - 10.4 months, compared to 5.6 months among those who completed high school.

Another survey of 900 dropouts and 100 graduates aged 15 to 24, carried out for this study by Goldfarb Consultants, found that 20 per cent of the dropouts were currently unemployed, compared to only one per cent of the high school graduates. This survey also found 56 per cent of the sample of dropouts, and only 19 per cent of the sample of graduates, reporting that they had ever been unemployed. And seven per cent of dropouts, but none of the graduates, said they were on welfare or social assistance at the time of the survey.¹⁸

3.) Education and Society

Vital as is the role of education in determining the competitiveness of our economy and the employability of individuals, it would nevertheless be a grave mistake to think that the importance of education in today's world is limited to matters of dollars and cents.

The effective functioning of our democratic system of government, and hence the overall quality of life enjoyed by all our citizens, depends increasingly on having a knowledgeable and well-educated population.

Everyone in our society - the ignorant and the well-informed, the university graduate and the high school dropout - has exactly the same voting power. And yet, as public policy issues become more and more complex, people without the background knowledge and the shared cultural and intellectual heritage provided by a good education will be increasingly ill-equipped to make intelligently informed choices.

This can affect not only the outcome of elections but also the day-to-day development of public opinion that political parties monitor so closely in shaping their policies.

When people lack the knowledge to understand difficult but important policy issues, it becomes tempting for them either to become indifferent to the political process or to follow the lead of people they find persuasive. But the workings of a liberal democracy can be well served neither by having an elite of the

educated make all the decisions amid the apathy of the uninformed masses, nor by having great numbers of the uninformed steer the direction of society by the whim or emotion of the moment at the behest of various demagogues.

To strengthen and maintain Ontario as a free, compassionate and truly democratic society, consequently, we must insist on an education that genuinely prepares our young people for the requirements not only of the workplace but also of the marketplace of ideas.

4.) A Relevant Education

Against this background, consequently, it becomes clear that a relevant education in today's circumstances is one that prepares young people for effective and satisfying participation both in an increasingly knowledge-intensive economy and in an increasingly complex society.

Contrary to past assumptions, the preparation requirements of these two quite different arenas - the work place and society at large - now are not competing but convergent.

The role of our elementary and secondary education system will be most relevant to economic and social needs - and hence to the needs of young people themselves - if the schools provide everyone with a high-quality general education.

The OECD's report on the hiring requirements of financial service firms in various countries, cited above, is illustrative of this point: "In general, the new requirements seem to place a premium on 'liberal

arts' education at the secondary and even early post high-school level, that is on curricula in which the emphasis is placed on teaching broad skills rather than specialized, vocational knowledge: reading, writing, arithmetic, capacity to communicate, both verbal and written, capacity to understand broad rather than specialized environments, capacity to identify problems and define solutions for oneself rather than memorize ready-made solutions to pre-assigned problems. As one interviewed bank official puts it: 'The bank can train anyone in specific techniques and procedures; the bank cannot train individual workers in thinking for themselves, in being at ease with broad and complex environments.'"¹⁹

Similarly, a 1983 Stanford University study concluded: "Everyone should acquire strong analytic, expressive, communicative, and computational skills as well as extensive knowledge of political, economic, social and cultural institutions....Since we cannot predict in any precise sense which jobs will be available to particular persons, which jobs they will select from among those available, and what the characteristics of jobs will be over a forty year working life, it is best to provide students with a strong general education and an ability to adapt to a changing work environment. Such adaptation requires a sufficient store of information about culture, language, society and technology as well as the ability to apply that information and acquire new knowledge."²⁰

Thus, there are not different relevant elementary and secondary educations, depending on an individual child's aptitudes, interests or presumed career potential or intentions.

There is, rather, only one kind of meaningful general education that is relevant to the needs of society and of the economy, and hence to the well-being of the young people who must participate in both. Our challenge is to define the necessary content of that education and to bring it into effect for all.

III. THE CONTENT OF EDUCATION

1.) Education Versus Schooling

To agree on the vital importance of education is not, however, to conclude the debate but merely to begin it in earnest.

Education does not automatically result from warehousing young people in schools for any given number of years. That's merely schooling. Education, in the real sense that is vital to our society and to individuals for the reasons outlined above, can only be discussed meaningfully in terms of outcomes - in terms, that is, of the actual knowledge and skills acquired by students during the time they spend in school.

But that is not the current approach. In recent years, we in Ontario have lacked the will, the confidence and the clarity of purpose to state specifically what our children should learn and then to ensure that they actually do learn it.

Instead, in the spirit of the Hall-Dennis report of two decades ago, stated policy in Ontario still regards education as a highly subjective open-ended process, rather than as a "product" that can be approached in terms of common, clearly-defined and measurable intended outcomes.

This was disturbingly highlighted during the consultation work of this study, when the following

question was put to a variety of very senior people in the Ontario education community: "If a young person drops out of high school in Grade 10, what specifically will he or she not know or not be able to do, that he or she would have known or been able to do after successfully completing Grade 12?"

Almost without exception, the response was along the following lines: "You can't put the question that way...The system doesn't work that way...It depends on the ability of the student, it depends on the school, it depends on what level of courses he's taking, it depends on which subjects he chooses..."

Indeed, a number of key features of the current elementary and secondary school system quite explicitly prevent it from being focussed on the pursuit of common outcomes.

In the elementary schools, for instance, the "spiral curriculum" exposes children to essentially the same subject matter at different ages, rather than expecting them to thoroughly learn one thing before moving on to the next. Ability grouping causes children in the same grade to be working at significantly different levels of difficulty in subjects such as reading. "Social promotion" causes children to be promoted from grade to grade with their age group even if they have learned considerably less than most of their classmates.

In the high schools, there are three separate program levels - advanced, general, and basic. A wide variety of course choices are available at each level. And there are considerable differences from school to school in the optional courses offered, in the actual content even of similarly named courses, and in academic

standards and expectations. As a result, there really is no such thing as a common high school education in Ontario at present.

And yet graduation from high school is not important as an end in itself, but rather for what it signifies. As educational historian Diane Ravitch reminds us: "When school reformers in the nineteenth century advocated universal education as a way of improving society, they meant a broad diffusion of knowledge and wisdom, not a broad diffusion of diplomas."²¹

Graduation from high school serves, or should serve, as a certification that a given individual has attained at least a certain commonly-understood level of knowledge and skills. If that certification is not regarded as reliable - if people no longer understand what is being certified, or if large numbers of graduates prove deficient in the expected knowledge and skills - then the value of the high school diploma itself is eroded.

In such a situation, employers no longer are inclined to trust the diploma as a signalling device that a young person has the necessary qualifications, even for a job that would not ordinarily require higher levels of education. They prefer to hire applicants with previous work experience - if a youngster is under-educated, let someone else discover it - or with higher education credentials that they regard as more reliable.

Then a vicious circle can set in. If young people who do not intend to study beyond high school perceive that graduates still have difficulty finding

employment, or can only get the kind of unsatisfying dead-end jobs available to dropouts, their incentive to remain in school until graduation is diminished.

There is evidence that such an erosion of confidence in the meaning of high school graduation is already taking place.

A 1985 survey by the Canadian Federation of Independent Business of its members found that, in Ontario, only 43 per cent were satisfied with the education system.²²

In a survey of Ontario employers carried out for the Toronto Star by Goldfarb Consultants in the spring of 1987, two out of three respondents said they believe Ontario children receive a poor or fair education; only six per cent of employers described the quality of education as excellent, while 29 per cent considered it good. On a scale of 100, employers in this survey gave graduates a rating of only 54 for reading comprehension, 40 for writing ability, and 53 for verbal skills and general knowledge.²³

Similar concerns exist within the academic community itself.

Tests of reading skills administered by Humber College to its freshman classes in the fall of 1984, 1985 and 1986 consistently found that at least 40 per cent of students were reading at or below Grade 10 level. In 1986, 16 per cent of them were reading at or below Grade 7 level.²⁴

D. John Phillips, director of education for the Board of Education of the City of York, wrote in 1984: "There is still a significant proportion of students

entering Grade 9 who can't read and write well enough to complete the program successfully. And when these young people finally abandon their formal schooling they, among other things, still can't read and write well enough to help them gain access to steady work...Despite the best efforts of many dedicated people, systems are not achieving a functional level of literacy for many pupils who have the fundamental ability during their elementary schooling.²⁵

The Ontario Secondary School Teachers' Federation itself, in a 1976 report entitled *At What Cost?*, has stated: "Most people seem to feel that (the Secondary School Graduation Diploma) is at best a diploma of dubious merit and at worst a worthless document. The reaction stems from their difficulty in interpreting what the diploma means...Until the Ministry of Education sets up rational standards, this low opinion of the diploma will persist."²⁶

But the damage caused by the current situation goes beyond merely eroding the credibility of the high school diploma and thus reducing the employability of graduates. If our system of education is not geared to ensuring that its graduates will actually possess the levels of knowledge and skills that today's circumstances require, then our economy will simply continue to do the best it can with inadequate human resources - and the resulting acceptance of mediocrity will inevitably undermine our international competitiveness.

A 1977 study for the Ontario Economic Council, *Basic Skills at School and Work*, aptly described this downward spiral of mediocrity: "At each level of learning or employment, skill deficiencies and related work attitudes are lamented and attributed to the setting from which the young person has arrived. Most important, they

become the basis for a set of accommodations which divide the realities of coping from the ideologies of discontent...At all levels, individuals and organizations adapt to the qualities of the available recruits. In eliminating skill demands which exceed the capabilities of employees, in adjusting levels of expectation, performance standards and workloads, in relaxing, on occasion, the structures of authority and weight of sanctions, employers are responding in ways equally characteristic of the university, college or secondary school."²⁷

2.) Inadequately Defined Goals

It seems axiomatic that our system of education cannot meet the needs of society and of individuals unless we clearly define those needs and then set out specific goals and objectives for meeting them.

And yet the currently stated goals of education for Ontario, as articulated by the Ministry of Education, are so vague, subjective and diffuse that they cannot possibly serve as an effective basis for action. The current statement of goals is the following:

1. Develop a responsiveness to the dynamic processes of learning
2. Develop resourcefulness, adaptability, and creativity in learning and living
3. Acquire the basic knowledge and skills needed to comprehend and express ideas through words, numbers and other symbols
4. Develop physical fitness and good health
5. Gain satisfaction from participating and from sharing the participation of others in various forms of artistic expression

6. Develop a feeling of self-worth

7. Develop an understanding of the role of the individual within the family and the role of the family within society

8. Acquire skills that contribute to self-reliance in solving practical problems in everyday life

9. Develop a sense of personal responsibility in society at the local, national, and international level

10. Develop esteem for the customs, cultures, and beliefs of a wide variety of societal groups

11. Acquire skills and attitudes that will lead to satisfaction and productivity in the world of work

12. Develop respect for the environment and a commitment to the wise use of resources

13. Develop values related to personal, ethical, or religious beliefs and to the common welfare of society

It is surely no exaggeration to say that if any executive presented a set of goals couched in similar terms to a corporate board of directors, he or she would at best be sent back to the drawing board to try again. These goals are so vague as to make compliance or non-compliance unmeasurable, and hence they are virtually useless as a strategic instrument.

What, for instance, is "responsiveness to the dynamic processes of learning?" How will we know if a student has developed it? What if he or she develops, instead, a responsiveness to "static" processes of learning?

What, exactly, is meant by acquiring "the basic knowledge and skills needed to comprehend and express ideas through words, numbers and other symbols?" How

"basic"? Ideas of what complexity? There is a world of difference between comprehending the ideas in a comic book or those in a Shakespearean play. A 6-year-old can "express ideas through words", but is that the quality of expression we would accept from a high school graduate?

How can we have goals of education that make no mention of acquiring knowledge in such fundamental disciplines as history, geography, the sciences, literature and mathematics?

What, for that matter, are "values related to personal and ethical beliefs"? As Mark Holmes, of the Ontario Institute for Studies in Education, points out: "Hitler, Idi Amin, Pol Pot and Stalin all developed values related to personal religious and ethical systems; they would have met Ontario's values criterion."²⁸

Far from being an isolated aberration, the vagueness of the official goals is a faithful reflection of the laissez-faire, unfocussed approach that has characterized education policy in Ontario for the past two decades.

A document entitled Circular P1JI - Provincial Curriculum Policy for the Primary and Junior Divisions of the Public and Separate Schools of Ontario clearly spells out the nature of this approach: "As part of its province-wide responsibility, the Ministry of Education establishes a common framework of goals and aims for education in Ontario, and sets out in a general way the learning opportunities that the programs in the schools should make available...This policy of issuing guidelines acknowledges that, to be effective, curriculum must be closely related to the characteristics and needs of the particular pupils for whom it is planned..."

"Programs developed at the local level...should allow individual children to move beyond the expectations of the program without subjecting those who cannot reach them to loss of self-esteem or confidence."²⁹

The provincial guidelines vary widely in their degree of specificity from program to program, but their focus is primarily on process, teaching methods and broad indications of subject content rather than on specifically prescribed outcomes in terms of knowledge or skills.

In the History and Contemporary Studies guideline issued in April, 1987, for instance, the content of the Intermediate Division is set out in nine pages of a 70-page document given over largely to a discussion of the learner's development, cognitive skills growth, considerations in course development, course design and program assessment; Part B of the document provides some sample material, without specifying core content.

3.) "Child-Centered" or "Content-Based" Education?

Much of the vagueness in the current goals and in the guidelines issued by the Ministry can be attributed to the prevailing "child-centered" philosophy of education.

If the interests, aptitudes, psychological state and stage of development of each individual child are to be the focal point of the educational process, then it follows logically that the central ministry cannot offer much by way of specific prescriptions for the system as a whole - neither, for that matter, can any board of education nor even any principal. The natural

consequence of this philosophy is fragmentation, a pedagogical Tower of Babel.

That would be acceptable if the philosophy worked in practice, if each "self-motivated self-directed problem-solver" - as the Ministry describes young children - somehow directed himself to learn by the time of high school graduation everything a young person needs to know to be a fully competent participant in our society. But, as the evidence cited above makes clear, that isn't happening.

The reason, broadly stated, is that the current approach is based on a theory that may be sound in the abstract, but that no one has quite figured out how to translate into consistently effective classroom practices.

Prior to the last two decades, educational theory was primarily founded on behaviorist psychology in which the learner tended to be viewed as acting in response to external stimulation.

The current theory is based, instead, on cognitive psychology, which sees the learner as an active partner in the teacher-learner transaction and which emphasizes the process of learning rather than the content to be learned; knowledge must be discovered by the learner, rather than imparted from outside.

The teacher's task, under this theory, is to create circumstances under which those discoveries will take place. But creating circumstances under which each child will discover precisely what acquiring a good education requires him to discover, within a mass education system, is an extraordinarily difficult task - and the harsh reality appears to be that cognitive theory

has failed to provide a clearly defined body of validated teaching practice based on the research.

What has emerged instead is a rather muddled sense that process can replace content, that it doesn't matter what a child learns as long as he or she is learning something, or even that it doesn't matter whether a child learns much as long as he or she feels happy, self-confident and socially integrated.

As the Ontario Secondary School Teachers' Federation has put it: "The strong emphasis on individualization and the happy school has overshadowed the development of basic skills and knowledge and vocational training."³⁰

The challenge, consequently, is to salvage what is valid from the theoretical approach of recent decades, and to reconcile it with the imperatives of a society that is entitled to have its children acquire specific knowledge and skills.

As Belgian educational researcher Viviane De Landsheere points out: "In school education, there is a perpetual conflict between two objectives: the overall physical, intellectual, emotional, motor and social development of the individual, on the one hand, and, on the other hand, the acquisition of knowledge, skills and techniques for instrumental purposes - reading, writing, calculation and initiation in the various branches of knowledge...Wisdom consists in substituting conciliation for (a choice between the two objectives)."³¹

In the context of future Ontario policy, "child-centered" and "content-oriented" education need not be conflicting concepts.

Education should be child-centered, in the sense of recognizing that the development of each individual child - each with his or her own predispositions, strengths and weaknesses, interests and learning styles - is the whole object of the exercise.

But it should at the same time be content-oriented, in the sense of recognizing that the whole object of the exercise is to develop each individual child by bringing him or her into possession of the specific knowledge and skills that every young adult coming into our society should have.

A vital and positive role should continue to be played by many of the key tenets of child-centered education - by the use of children's existing interests to spark new ones, for instance; by the supplementation of book-based instruction with a broad variety of activities and experiences that enable children to learn by doing; by the effort to make learning as exciting and enjoyable as possible, rather than mere drudgery; and by the tailoring of instructional methods as closely as possible to the learning style of each child.

But process should not be confused with product. All these techniques should be recognized not as an end in themselves, as often seems to be the case at present, but as a means to an end - that end being the acquisition by each child of the specific knowledge and skills that we define as the intended outcome of the education process.

There is nothing utopian or fanciful about such an attempt to reconcile the two competing schools of educational thought. It entails, quite simply, deciding what the content of common education in Ontario should be, and then using the full array of educational skills and techniques at our disposal to bring each child to successful command of that content.

It is therefore recommended:

1. That the emphasis of educational philosophy in Ontario be shifted from process to outcomes, and that the objectives of education be defined in terms of the acquisition of specified demonstrable knowledge and skills by all children, through the application of pedagogical techniques appropriate to each child's needs.

4.) The Over-loaded Curriculum

The problem at present isn't that no one has any idea what should be taught in the schools. It's that so many people have so many different ideas that the curriculum is already over-loaded and fragmented, and hence trivialized and rendered ineffectual.

It may well be, indeed, that the current emphasis on process rather than content is at least in part a response to this over-loading. Faced with so many competing demands and fearful of rebuffing various pressure groups, the educational establishment may have found it irresistibly tempting to avoid hard choices by accomodating almost everyone, teaching a little bit of

everything and therefore not requiring students to demonstrate a thorough, in-depth knowledge of anything.

Over the years, more and more tasks have been transferred from the family and the community to the school. In addition to - or, perhaps, in preference to - the normal academic subjects, society now expects the schools to provide children with health education, sex education, consumer education, values education, environmental education, education about the evils of nuclear war, education about the workings of the media, education about multiculturalism and about racism, and education in an almost endless list of other fields.

The result is a situation that Duncan Green, assistant deputy minister of education, summarizes this way: "I personally think that unrealistic expectations are being placed on the system. There's no coherent framework for them...When you make so many things separate compulsory courses, you end up saying, 'Okay, you guys - we've got 15 minutes on AIDS; then by the way, we've got to do French, so the nation will hold together; then we've got this optional bit of heritage language - how many are staying for that?' So that the school day, in order to accommodate all these specifics, just gets littered with stuff. So there's a sense in which the curriculum gets warped, bent, has to accommodate too many subjects or too much content or too many issues."³²

There is reason to be concerned, consequently, that we are facing precisely the situation about which American educator Arthur Bestor warned as long ago as 1953 when he wrote: "The idea that the school must undertake to meet every need that some other agency is failing to meet, regardless of the suitability of the classroom to the task, is a preposterous delusion that in the end can wreck the educational system."³³

If we are to have a system of education that focusses meaningfully on intended outcomes for all students, therefore, the unavoidable first step is to make hard choices - to pare down the list of those intended outcomes to a manageable number that the schools can realistically be expected to bring about.

In doing this, we need to ask what the schools are uniquely equipped to teach, and what can be handled to one degree or another by the family and by other agencies in the community.

It cannot reasonably be expected, for instance, that most parents are in a position to give their children a detailed knowledge of Canadian history, to teach them complex mathematical operations by the most pedagogically effective methods available, nor even to develop their writing skills to the fullest. Such tasks are best entrusted primarily to the schools and to professional teachers.

By the same token, it does not require all the sophisticated resources of our school system to explain to children in detail how to deposit money in a bank or how to write cheques, for instance, or to teach them how to cook or plan a meal. Such tasks and many others can reasonably be regarded as the primary responsibility of parents, as they used to be in the past.

This view is open to objections on two broad types of grounds. First, it is argued that if our schools are to be instruments of social improvement, they must teach everything of importance young people should know,

because we cannot rely on parents - particularly those in the lowest socio-economic groups - to teach the right skills or attitudes. Second, it is argued that with the growing number of single-parent families and families in which both parents are in the work force, many parents simply don't have the time to teach their children much.

These are both powerful arguments, and it would be attractive to continue basing policy on them if the system that is currently designed to do so were working. Since it demonstrably is not, we are compelled to recognize that in attempting to please everyone, we end up pleasing no one and shirking our obligation to the young people whose education is our responsibility.

At some point, courage on the part of the decision-makers must enter the equation. While it ought not to be impossible to reach reasonably broad agreement on many of the key priorities for educational content, unanimity is certainly unattainable. Ultimately, to govern is to choose, and one of the inescapable burdens of government is the obligation to say "No" even to the most vigorously pressed interest-group demands when the public good requires it.

5.) Deciding on Content

What, then, are the indispensable elements of educational content around which a broad consensus can be shaped?

Justifying the importance of each of the following fields of study would seem like belaboring the obvious, were it not for the fact that current education policy in Ontario fails to make meaningful achievement by

all students in all these fields a priority. It seems reasonable to hope that we could come to agree on the following essentials:

a) English (or French in the francophone schools)

Reading, writing, speaking and listening are the fundamental tools for meaningful participation in our society.

It surely is no exaggeration to say that if our schools cannot bring all their students, except the mentally retarded or otherwise seriously handicapped, to very considerable proficiency in these four crucial skills by the time of graduation from high school, it scarcely matters what else they do; they will have failed in their responsibility not only to those students but to society at large.

Reading, in this context, entails more than just the ability to decode words or to grasp the rough meaning of a passage. We are entitled to expect, as an outcome of public education in Ontario, that young people will be able to bring to all but the most arcane or technically specialized texts a demonstrable command of the higher-order reading skills: comprehension, ability to distinguish salient points from peripheral content in what is being read, and ability to draw inferences from written material.

We are also entitled to expect the education system to bring its students to demonstrable proficiency in writing. It does not suffice that they be able to express themselves in writing "creatively" or confidently in what is euphemistically called "non-standard" - that is, ungrammatical, imprecise or misspelled - English.

The erosion of a common standard of English usage can only lead inexorably to erosion of the quality and clarity of communication itself. As an essential outcome of elementary and secondary education, young people should be able to write with clear and orderly structure, correct grammar and punctuation, and correct spelling.

They should also have been taught proficiency in speaking coherently, precisely and grammatically. Given the centrality of the spoken word in day-to-day human communication, the education system does young people no favor if it seeks to preserve their self-esteem by failing to correct their use of "non-standard" English: The inarticulate or the slovenly of speech are constantly at risk not only of being misunderstood but also of being mistaken for the ignorant.

Listening is a vital communication skill that we too often take for granted. The ability to focus attentively on what the other person is saying, instead of thinking ahead to one's own response; the ability to listen with a view to memorizing precisely what one hears said; the ability to listen for nuances of meaning or intent in spoken communication - all these are skills that can be honed through coaching and practice.

b) Learning to Think and Learning to Learn

No less vital than English communication skills are two types of intellectual skill - the ability to think clearly and the ability to learn effectively.

Clear thinking involves the ability to analyze, synthesize, evaluate, distinguish the relevant from the peripheral and fact from opinion, solve problems and make decisions. Effective learning involves the ability to

quickly identify, assimilate and apply the relevant information in any field of endeavour.

These are not skills that come naturally, or that can be taken for granted. They must be developed through specifically planned programs of instruction, practice and individual coaching at both the elementary and high school levels; there is much to be said, for instance, for the re-introduction of formal logic as a subject of instruction. These thinking and learning skills should, obviously, be honed by being brought into play in the study of all subjects at all levels.

The progress and developmental needs of each student with regard to these skills should be carefully monitored. Whenever a student encounters difficulty in progressing satisfactorily in the development of either skill, remedial attention should be provided just as urgently as it should in the case of reading.

c) Mathematics

In today's high-tech world, the need to understand mathematical relationships and to think quantitatively is no longer limited to a few sophisticated fields such as science and engineering. Numeracy becomes virtually as important as literacy in an era when computerized production methods in such industries as car manufacturing, for instance, require ordinary workers to deal with numerically-controlled machinery and with statistical quality-control methods.

It does not suffice to say that young people who are not mathematically inclined can always rely on pocket calculators. Batteries wear out at critical moments; calculators get misplaced. More important, unless a person understands the basics of arithmetic, algebra and geometry, even calculus, he or she won't know

what operation to perform with a calculator to solve a given problem. And unless a person has learned to think mathematically, he or she won't recognize when an error in using the calculator has produced an answer that is of an entirely wrong order of magnitude.

By high school graduation, consequently, all students should be brought to demonstrable working ability at least in arithmetic, basic algebra and geometry.

d) Literature

The great works of literature are essential elements of our cultural heritage. They provide us with common reference points that transcend our individual differences, and their themes enable each of us to relate to the universality of the human experience across time and distance. And Canadian literature enhances our sense of our own identity.

To complete one's schooling without having read any Chaucer, Shakespeare or Dickens, without having experienced the poetry of Shelley, or Coleridge, or T.S. Eliot, is to wander out into the world a cultural illiterate cut off from the beauty, the richness and the power of the English literary tradition.

And yet the Ministry of Education's most recent curriculum guideline for high school English prescribes only that literature selections "should enable students to see men and women in a variety of roles, exhibiting a wide range of human behavior, abilities and emotions"³⁴ - a requirement so empty of meaning that it could be met as readily by Harlequin Romances as by Jane Austen, by Harold Robbins as by Hemingway.

We are entitled to expect better of our schools than to inflict upon society great numbers of the spiritually impoverished who see no difference in quality between a sonnet and a commercial jingle, and whose sense of human experiences other than their own is shaped only by the latest situation comedy on TV. We should be able to take for granted that, by the time they complete high school, all students will have completed a program of required reading in some of the great works of the English language.

e) The Sciences and Technology

In a world that is being transformed daily by new scientific discoveries, a knowledge of the basics of science - not only introductory science, but also chemistry, biology and physics - is essential for all young people.

So rapid is the pace of change that we cannot predict, over the span of time that today's students will be in the labor force, what occupations will eventually require basic knowledge of scientific principles and the scientific method as a foundation for further job-related learning. Young people who lack that foundation may find later in life that their ability to learn, and hence their employment choices, have been needlessly limited.

Society at large also has a broader interest in ensuring that all our graduates have a solid basic background in the sciences. Without such a background, they will be unable to understand, let alone intelligently judge, the difficult decisions society will increasingly have to make as to whether what is scientifically possible is ethically and socially acceptable.

For this reason, it is important as well that study of technology be added to the science program, to give young people an understanding of how technological developments over the years have shaped societies and changed our lives for better or worse.

As Ernest L. Boyer, president of the Carnegie Foundation for the Advancement of Teaching, puts it: "The great urgency is not 'computer literacy' but 'technology literacy'....The challenge is not learning how to use the latest piece of hardware but asking when and why it should be used."³⁵

f) History

"Where there is history," wrote 16th-century Spanish scholar Juan Luis Vives, "children have transferred to them the advantages of old men; where history is absent, old men are as children."³⁶

In a society whose populace does not know or value history, decisions are made on the impulse of the moment, without understanding how the past has brought us to the present and without having learned how to avoid repeating mistakes previously made.

The current debate about the Meech Lake constitutional accord, for instance, can scarcely be meaningful to anyone who has no idea of the principles that governed Canada in the past. If one knows nothing of the vision of Canada espoused over the years by prime ministers as diverse as MacDonald, Laurier and King, it is easy to believe that defending a strong central government is just the personal idiosyncrasy of a single former prime minister named Trudeau. Similarly, the current debate about free trade with the U.S. cannot be understood in its full context without a knowledge of

Canada's painstaking evolution to full sovereignty over the past century.

But Canadian history alone does not suffice. We live in an increasingly interdependent world. Our population cannot understand world events, and intelligently direct through public opinion the role that Canada should play in those events, without some knowledge of world history. To be ignorant of the great sweep of global history, from early civilizations through to the events of the 20th century, is to be cut off from our own roots and hence from much of our own humanity.

It is therefore necessary to move beyond current education policy in Ontario which requires high school students to take only one Canadian history course - of vaguely specified content - and no mandatory courses at all in world history.

By the time of graduation from high school, all students should demonstrably have at least a good basic knowledge and understanding of both Canadian history and world history.

g) Geography

Similarly, it seems self-evident that no one can claim to be even modestly well-educated without a knowledge of the location and key characteristics of at least the world's major countries, and at least a rudimentary understanding of how land forms and climate around the world affect human lives.

And yet current Ontario policy requires students to take only a single course in Canadian geography; no study of world geography is required. This produces graduates like the grade 12 general-level

student, encountered during the work of this study, who was asked in what country Barcelona is located and confidently replied: "Italy." Informed that the city is actually in Spain, she responded: "Well, it sure sounds Italian. I guess it must be right near the Italian border, eh?"

By the end of high school, all students should have knowledge of Canadian geography and world geography.

h) Citizenship

It is essential that the schools impart to students a knowledge and understanding of Canada's system of government and the role of the individual within that system.

There should be a detailed program of study that ensures our young people are prepared for citizenship by awareness of such vital matters as: the principles of electoral democracy and how such democracy differs from authoritarian rule; our parliamentary form of government and the processes by which laws are made; Canadian federalism and the respective roles of Parliament and the provincial legislatures; the role and workings of the courts and the judiciary; the role of non-governmental institutions such as business, labor unions and the volunteer sector; the meaning of national sovereignty and the realities of global interdependence; and the rights and responsibilities of citizens in Canadian society.

i) Work in Society

Instead of narrow vocational training, which our high schools cannot meaningfully provide in today's era of rapid economic and technological change, there

should be for all students a common program of study about work.

Areas of study should include: the evolution of society's approaches to work and employment over the years; the expectations of employers regarding attitudes and work habits, generic skills and levels of performance; the nature, and the training and skill requirements, of various occupations; the importance of non-discrimination and equality of opportunity in the workplace; and the role of entrepreneurism.

j) French (or English in francophone schools)

Because Canada is a bilingual nation, having our young people learn French enhances their ability to participate to the fullest in Canadian society at the same time as it strengthens national unity.

There is much to be said in general, moreover, for acquiring early in life the ability to communicate in a second language. When the psychological hurdle of being accustomed to expressing oneself only in one language is overcome while still in childhood, it becomes far easier to subsequently learn other, additional languages.

But requiring only a single high school credit in French - as is currently the policy - is worse than useless. No student is going to acquire functional proficiency in the language by taking just one course. Instructional time in our schools is too scarce to be devoted to symbolic political gestures that are not geared to producing meaningful outcomes.

To be worthwhile, the teaching of French should take place at all grade levels, with a real commitment to enabling young people to speak and read, and preferably

also to write, the language in everyday-life circumstances.

k) The Arts

The arts - including music, drama, dance, painting and sculpture - play a vital role in enriching our lives both through self-expression and through appreciation of the talents of others.

Public education in Ontario should address both these dimensions of artistic fulfilment. Children and young people should be led to develop their own creativity and to discover any special talents they might possess. But uncritical acceptance of any and all "self-expression" does not, in itself, constitute an adequate education in the arts. Young people should be taught aesthetic discernment - the difference between scribbling and painting, between pounding on piano keys and making music, between posturing on a stage and acting.

They should be introduced to our heritage of great artistic accomplishment in all its forms - not to be taught that one form is necessarily superior to another, but to be made aware of the possibility that they might find enjoyment, for instance, not only in rock music but also in opera and the classical repertoire, not only in movies but also in museums of art.

l) Fitness and Health

While focussing on developing the knowledge and skills of their students, Ontario's schools should not overlook the physical dimension; the pursuit of "a sound mind in a sound body" should be a guiding maxim.

Indeed, there is considerable evidence that the two are closely linked, with physical fitness promoting mental alertness. A much-publicized experiment in Vanves, France, clearly established, for instance, that elementary school children who spent fully one-third of all school time on gymnastics, games and swimming were not only healthier and more rapidly maturing than those in the regular program, but also performed considerably better academically.

The fitness and health program in Ontario's elementary and secondary schools should encompass not only traditional physical-education activities, but also instruction in such matters as healthy diet, the consequences of alcohol and substance abuse, mental health and stress management.

* * *

Bringing students to a solid command of the requisite knowledge and skills in the 12 essential content areas suggested here would take up most, if not all, the available instructional time. Other curriculum content should be added within regular school hours only if, and only to the degree that, such addition would not dilute achievement in these areas.

That does not mean that concern for the emotional, psychological and social development of children would disappear from our schools. Quite the contrary, the development of affective attributes such as self-esteem, self-reliance, creativity and capacity for teamwork is a crucial element of all good pedagogy, and no teacher worthy of being employed in our schools could fail to integrate it into his or her teaching approach.

But while the development of affective attributes is a necessary consideration in the educational process, it is not a sufficient one. Education should not be confused with group therapy. We ought no longer to shrink from reaffirming explicitly that education is ultimately about the acquisition of knowledge and skills.

When all is said and done, we cannot hold the schools directly accountable for ensuring that every child will emerge from the education system self-confident, creative, happy or fulfilled; too many other factors beyond the school's control - in the home, in the community, in individual personalities - are involved in determining those outcomes. What we can hold the schools directly accountable for, as their assigned sphere of responsibility and expertise, is ensuring to the maximum extent possible that every child will emerge from the education system knowing that which society has decided he or she should know and possessing those skills that society has decided he or she should possess.

It is therefore recommended:

2. That the essential content of education in Ontario for all students be defined in terms of the acquisition of demonstrable knowledge and/or skills in the following areas: English (reading, writing, speaking and listening); clear thinking and effective learning; mathematics; literature; the sciences and

technology; Canadian and world
history; Canadian and world geography;
citizenship; work in society; French;
the arts; and fitness and health.

6.) Restoring Common Education

If we do agree that what has been itemized above - or some other, similar list - is a fair summation of the minimum knowledge and skills that every young person in our society should acquire, then surely this should prescribe what all the students in our schools are taught.

There is little apparent logic in continuing the decentralization of curriculum planning that has characterized Ontario education in recent decades. In theory, this decentralization is intended to permit the content of education to be adapted to the differing needs of various communities across the province. But in reality, those needs do not differ in terms of content.

Would a young person in Thunder Bay need to acquire less proficiency in mathematics, say, than one in Peterborough? Is a knowledge of history more or less important in Hamilton than in Kingston? Could reading great works of English literature be less important for students in Ottawa than for those in Parry Sound?

We are, in any event, a very mobile population. Ten years from now, the Thunder Bay student might be

working in Hamilton, the Ottawa student might be in Parry Sound, and so on. And every young person, upon turning 18, will have exactly the same voting power to make judgments about the future of our society, no matter where in Ontario he or she lives or has been educated. Under these circumstances, having the essential content of education vary from school board to school board and even from school to school is an absurdity.

It may well be, on the other hand, that methodological needs do vary across the province. Because children in different types of communities - urban or rural, predominantly low-income or upper-income, with a high or low proportion of recent immigrants - may tend to differ in their instructional needs and background knowledge, different teaching techniques or approaches to school organization may be appropriate in different places.

For this reason, what we need is the reverse of the approach we have had in recent decades. Instead of primarily prescribing techniques in its curriculum guidelines and leaving the determination of content up to local authorities, the Ministry of Education should specifically prescribe the content of education and the necessary outcomes in terms of what students demonstrably should know and be able to do, and leave it up to local authorities to select the techniques for achieving those required outcomes.

The need for such a shift does not imply criticism of school boards or local education officials. The issue is not that they approach curriculum planning ineptly, but rather that they all approach it differently, at a time when what we need in Ontario education is coherence and consistency.

Given the central importance of education not only to the well-being of individuals but also to the economic competitiveness and future prosperity of Ontario as a whole, it seems entirely appropriate that the level of government responsible to all Ontarians be responsible for determining on our behalf what young people should know and be able to do as an outcome of public education.

It is therefore recommended:

3. That the Ministry of Education specifically prescribe program content and the necessary knowledge/skills outcomes on a province-wide basis, while delegating to local authorities the selection of pedagogical techniques for teaching that content and bringing about the prescribed outcomes for all students.

It also makes no sense to say, as Ontario has in its policy over the last several decades, that what a young person needs to know and be able to do by the end of high school should depend on whether he or she intends to go to university, to community college or straight into the work force.

In fact, logic suggests that if a person is not going to continue on to higher education, he or she needs to learn more, not less, in high school because that may well be the last exposure to formal education.

By putting strong emphasis on the acquisition of specific knowledge and skills only in the case of the university-bound, we as a society are paying only lip-service to the

concept of universal public education. We are really saying, in effect, that we believe only a little more than half of our young people - those in the advanced-level high school program - are capable of benefitting from what we consider a genuine, full-scale education. For the rest, we have concocted a kind of educational placebo - two lower levels of diluted content, unclear purpose and inadequate outcomes - that enables us to pretend to ourselves that we are "educating" everybody.

The issues of tracking and ability grouping will be addressed in greater detail in Part Three of this report. Suffice it here to say that we should reaffirm the universality and commonality of public education in Ontario by providing instruction in those 12 essential content areas equally to all our young people. Some will be able to master the material with a very great deal of sophistication indeed and to go well beyond the prescribed content in various subjects. Others will have only a limited grasp of the subject matter and will need considerable help. But all will be learning, to one degree of accomplishment or another, what they all need to know.

7.) The Vital Issue of Accountability

There can be no effective pursuit of excellence in educational outcomes without meaningful accountability, and there can be no meaningful accountability without measurable standards of accomplishment.

If we are to restore to education the necessary emphasis on content and outcomes, then everyone involved - students, parents, educators, the community at large and the Government - must have a way of knowing whether the content is being sufficiently assimilated and the outcomes are being satisfactorily achieved.

Both knowledge and skills being by nature demonstrable, it follows that the way to establish with clarity and consistency at various stages of the education process what each student knows and is able to do - and hence what remedial efforts are necessary if he or she knows, or is able to do, too little - is through tests. And in order for everyone involved to find the results of such testing a meaningful indicator of outcomes, it is essential that there not be wide variance from teacher to teacher, school to school and board to board in what is tested and how it is evaluated. Province-wide standardization, in one form or another, is inescapably necessary. (This issue will be addressed further in Section Three of this report.)

Let it be clearly emphasized, however, that testing should not be an end in itself. The purpose should not be to identify and reward the academically successful, and to label and discard the unsuccessful.

Rather, the purpose throughout the years of schooling should be diagnostic and remedial: to establish whether a student's knowledge and skills in the essential content areas at least meet an established standard of accomplishment for that particular stage of the education process, or whether he or she needs additional help to attain that standard. And at the conclusion of high school, the purpose of testing should be credentialization: the provision of reliable assurance to the student and to the community that he or she possesses at least the minimum requisite knowledge and skills.

Such an approach requires a fundamental shift in the locus of accountability in our system of education.

At present, the philosophical premise in the Ontario system is quite explicitly that the student is ultimately responsible for his own education or lack thereof.

For students of all ages, the Ministry of Education's policy objectives and curriculum guidelines in recent decades have been phrased in terms of "learning opportunities" rather than pedagogical outcomes.

Thus, for instance, the document setting out curriculum policy for the primary and junior divisions of elementary schools states: "It follows that the curriculum will provide opportunities for each child (to the limit of his or potential)....to acquire the basic skills fundamental to his or her continuing education."³⁷

Similarly, the guideline for history and contemporary studies in the high schools states: "The programs and courses described here will provide students with opportunities to understand how the global society has evolved and works..."³⁸

These constant references to "opportunities" reflect a clear underlying premise as to the locus of accountability: If a child does not learn something that has been presented in the curriculum, then - by definition - he or she either lacks the potential for such learning or has chosen not to grasp the opportunity to learn. Either way, the resulting lack of knowledge or skill is ultimately the fault of the child and not of the system.

But surely it is absurd, and profoundly unfair, for adults to operate on the premise that 8- or 10- or 15-year-old children should bear the final responsibility - and the consequences for the rest of their lives - of deciding whether or not to take advantage of "opportunities" to learn.

It is also, to put it mildly, unique in terms of the way professional accountability is usually viewed in our society. Everywhere but in education, outcomes are seen to be the responsibility of those engaged to produce them.

A surgeon performing an appendectomy is not thought merely to be giving the patient an "opportunity" to recover; if a patient otherwise in normal health promptly dies after the surgery, the surgeon and the hospital will have some explaining to do. Architects and engineers are not regarded as merely providing "opportunities" for buildings to remain upright. For that matter, a business company that has a deficient product or an ineffectual sales force is likely to go out of business - but a high school whose pupils learn too little is unlikely at present even to be detected, let alone called to account.

It does not seem unfair - indeed, it seems a reaffirmation of their professionalism - to say that teachers and schools should be accountable for bringing children and young people to a command of knowledge and skills.

This does not mean that all children can be brought to the same degree of accomplishment. It does mean that the objective should be to bring all children,

except for those with insurmountable handicaps or disabilities, to at least the level of accomplishment we define as necessary in terms of knowledge and skills. The challenge for teachers and schools would be to use all the expertise, ingenuity and varied pedagogical techniques at their disposal to bring about that outcome for every student or to justify specifically those instances where it could not be brought about.

It must be emphasized that this responsibility cannot be placed on teachers alone, without providing them with the resources and support they need to fulfil it. Every component of our education system - teachers, principals, school boards, the Ministry of Education, and so on - should be accountable for their respective roles in the outcomes produced by the system as a whole.

At all levels of the system and in society as a whole, we need to refocus our thinking and reaffirm that the role of elementary and secondary education in Ontario - a role on which we spend more than \$6 billion a year - is not merely to teach but to bring about learning.

8.) The Duration of Schooling

There is nothing magical, in the abstract, about 12 years as the duration of public education; it could be either more or less.

It does appear clear, however, that it would be unreasonable to expect that the essential content described above could be handled, and the necessary knowledge and skill outcomes accomplished, in less than the 12 years currently allocated.

It also appears clear that once we agree on the essential knowledge and skills that young people should possess before entering adult life, then our objective should be to ensure that all young people remain in school long enough to acquire that knowledge and those skills. Because it results in a shortfall in that acquisition, the dropping out of students before completion of high school should be seen not only as an immense personal loss for those students but as a failure of the education system and of society at large.

As in the case of learning "opportunities," it does not suffice to say that individual young people are responsible for deciding whether or not to stay in school until graduation. Neither teachers, guidance counsellors and principals nor school boards nor the Ministry of Education should ever be neutral with regard to that choice. Rather, all the participants in our system of education should be responsible and accountable for doing everything possible to motivate and help every student to remain in school until graduation.

It is therefore recommended:

4. That it be made an explicit and vigorously pursued goal of education policy in Ontario to have all students, except those precluded by severe mental or physical disability, continue in high school until graduation.

9.) Excellence and Retention

If performance objectives for the education system are defined primarily in terms of reducing the

dropout rate, there will be an irresistible temptation to try to "bribe" students into staying until graduation by reducing the academic demands placed on them; quality will suffer.

If performance objectives for the education system are defined primarily in terms of excellence of student achievement, there will be an irresistible temptation to push out the more difficult-to-educate students who cannot easily be brought up to those standards; the drop-out rate will increase.

Either way, the results of a single-minded approach would be unacceptable. There would be no real qualitative difference between a hypothetical education system that kept 98 per cent of students in school at the expense of teaching them little, or one that taught a great deal to 50 per cent of students at the expense of casting aside the rest - both would be dismal pedagogical failures.

The objectives of excellence and retention should instead be pursued simultaneously and in balance. We should seek the attainment of satisfactory levels of knowledge and skills by all students, and we should do everything feasible to encourage and help as many students as possible to remain successfully in school to attain that knowledge and those skills.

Such a balanced approach has the potential, in fact, to serve both objectives very successfully. As will be discussed in the subsequent parts of this report, the same changes in approach and structure that would help bring students to successful learning outcomes would also be likely to address some of the most significant causes of dropping out.

It is therefore recommended:

5. That high-quality educational outcomes for all students and retention of all students in high school until graduation be seen as necessarily parallel and complementary, not competing, objectives and that they be vigorously pursued simultaneously.

PART TWO:
UNDERSTANDING THE ISSUE OF DROPOUTS

I. OVERVIEW

"I just wanted to get out and get a feel for people who cared, and go where people could answer questions honestly. Not teachers who didn't care about students. After all, we are the men of tomorrow. That sums it up. Well, maybe teachers could be taught when they're in school how to deal with young people and to be sure their students are learning."

"If you failed an exam, they dumped on you and they didn't show you where you went wrong. They treated me like a grade school kid."

"I left to find a job. To make money. Just to look for any job. Nothing specific at the time. I wasn't doing very good and was in trouble all the time. I was depressed because I wasn't doing very good."

"I wish I'd had more contact with teachers. They teach a whole class instead of teaching individuals."

"The teachers weren't there for me. I was an A student, but I didn't like their attitude. They didn't care."

"I'm not smart, so the school system ignored me."

These are the voices of our children, of young people in Ontario who dropped out of high school before graduation.³⁹

They are not the words of "dummies" or the uneducable. Quite the contrary, many of the randomly-selected dropouts who took part in focus-group discussions as part of the work of this study are strikingly articulate and thoughtful.

For one reason or another - difficulty with one or more subjects, for instance, a sense of alienation or boredom, or learning styles that didn't match teaching styles - they just didn't fit comfortably into the structures of their high schools. In a very real sense, many of them felt rejected by the education system before they rejected it.

The cutting short of the education of so many young people - nearly 70,000 of them a year⁴⁰ - is a tragic waste, not only in terms of narrowing the range of opportunities they themselves will have throughout their lives but also in terms of diminishing their potential contribution to society as a whole.

There nevertheless is no "silver bullet" for the dropout problem - no single measure or neatly-packaged set of measures that will, of itself, induce all young people to stay in high school until graduation.

Indeed, while various specifically targeted initiatives may be useful at the margins, it appears highly unlikely that a major reduction in the dropout rate can be accomplished by dropout prevention programs carried out in isolation from the rest of what is happening in our system of education. What must be addressed, rather, are those structural and attitudinal characteristics of the education system itself that cause great numbers of young people to feel alienated, bored, rejected or unable to cope academically.

The nature of the necessary remedies is readily apparent from the available data, which tell us quite clearly what the dropout rate is, who drops out, and why.

II. THE DIMENSIONS OF THE PROBLEM

1.) Defining Dropouts

This study defines a dropout as any student who leaves school before having obtained his or her Secondary School Graduation Diploma (SSGD). In practical terms, that means any student who leaves high school before having successfully completed Grade 12.

This definition deliberately does not distinguish between those who leave and subsequently return, and those who leave and stay out. If one were doing a study of the phenomenon of divorce, the divorce rate would encompass everyone who obtains a divorce; the proportion of divorcees who subsequently remarry is a separate and quite distinct statistic. So too, a dropout is a dropout, whether or not he or she eventually returns to school; the subsequent educational fate of dropouts - of whom only a small proportion ever do complete high school - is a separate matter.

This definition also does not exclude from the statistical ranks of dropouts those students who obtain a Certificate of Training after completing Grade 10. It is acknowledged that completion only of Grade 10 and receipt of the certificate is the planned educational outcome for some students with physical or mental handicaps. But if completion of Grade 12 and receipt of the SSGD is the norm expected by society, it is appropriate to include within the dropout statistic everyone who leaves before meeting that norm - while acknowledging that the dropout rate includes a small minority of students for whom non-completion may be inescapably necessary.

2.) The Dropout Rate

Because there is at present no central statistical data base tracking the progress of individual students through the school system, the quality of available statistics regarding the dropout rate leaves much to be desired.

It has nevertheless been possible for this study to arrive at a reliable approximation of the dropout rate, because three separate sets of statistics lead to almost exactly the same figure. Taken individually, each of these three methods of calculating the dropout rate has serious weaknesses; the convergence of the results, however, is persuasive.

First, a crude retention rate can be constructed by calculating the proportion of the student cohort enrolling in Grade 9 in any given year who obtain the SSGD four years later.

Thus in 1985 - the most recent year for which data is available - the number of students obtaining the SSGD was 67 per cent of the number of students enrolled in Grade 9 in public and private schools four years earlier. A sense of consistency may be derived from the fact that the comparable figure for 1984 was also 67 per cent.⁴¹

This method of calculation has a number of obvious weaknesses. For instance, it does not allow for students who take more or less than four years to complete their diploma. It also does not take into account factors other than dropping out - notably death and migration - that can affect the number of students in each cohort remaining to complete Grade 12; while both

these factors are present, neither is statistically significant.

On the basis of this cohort tracking approach, in any event, it appears that roughly 33 per cent of students enrolled in Grade 9 drop out before successfully completing Grade 12 and obtaining the SSGD.

A second means of approximating the dropout rate is to calculate each year's "retirements without certificate" - that is, the number of students leaving the system without having graduated - as a percentage of total enrollment in Grades 9 to 12. (These figures were published only for the publicly supported portion of the secondary school system.)

In 1984, retirements without certificate were 8.7 per cent of total enrollment in the public secondary system. In 1983, the comparable figure was 8.3 per cent.⁴²

Because this figure represents the loss only in any one year out of the four years that each student cohort normally spends in high school, the annual percentage loss must be compounded over four years to arrive at an approximation of the actual dropout rate. When this is done, the dropout rate under this method of calculation works out to roughly 30 to 33 per cent.

Finally, a third and entirely different approach is to look at the educational status of the Ontario population as indicated by Census data. By focussing on the level of education attained at age 22 - an age by which few people are likely to still be in high school on their first attempt to graduate - it is possible to arrive at a meaningful proxy for the dropout rate.

Here, too, the statistics are imperfect. They are based on 1981 Census data and they involve only a limited sample of those Ontarians living in Census Metropolitan Areas and Census Agglomerations of 50,000 and more; approximately 74 per cent of Ontario's population lives in those areas.

Calculations based on these data show 31.2 per cent of 22-year-olds not having completed high school and therefore presumably having dropped out.⁴³

Thus, three very different methods of estimating the dropout rate all produce a figure of between 31 and 33 per cent.

These calculations all being of necessity imperfect, it may well be that the actual rate is a few percentage points higher or lower. But it is difficult to see why that would matter, or what purpose would be served by further statistical debate.

We can confidently state that roughly one-third of young people in Ontario drop out of high school before graduating from Grade 12. Surely our level of concern, and the appropriate policy response, would be the same whether the precise rate is 30 per cent or 35 per cent.

It is therefore a finding of this study that the high school dropout rate in Ontario, as precisely as it can usefully be identified, is between 31 and 33 per cent.

III. WHO DROPS OUT

Any attempt to stereotype dropouts would be misleading. Their ranks include the academically gifted as well as low achievers, and students from the most affluent households as well as from the neediest.

The substantial body of research carried out on the dropout issue over the years here and in the U.S. does show clearly, however, that students in certain categories are more likely to drop out than others.

1.) Socio-Economic Status

Virtually every study ever done on the dropout issue has found a strong link between family background and the likelihood of dropping out. The lower the income level, occupational status and level of education of his or her parents, the greater is the statistical risk that any given student will not complete high school.

Thus, for instance, a province-wide study carried out for the Ministry of Education by John Porter, B.R. Blishen and Maria Barrados reported in 1977: "Higher family socio-economic status and higher levels of father's education are found to be associated with higher levels of school performance, higher levels of self-concept or ability, higher levels of educational expectations, a greater tendency to be enrolled in a five-year program and staying in school longer."⁴⁴

Similarly, a Toronto Board of Education study concluded in 1985: "Students whose parents' occupations were categorized in the lower categories, unskilled and semi-skilled, were more likely to terminate early than students whose parents' occupations were categorized in

the higher categories, professional, managerial, etc. This is true for both mothers' occupations and fathers' occupations."⁴⁵

And the Carnegie Foundation's Ernest Boyer, in his exhaustive examination of U.S. high schools, stated: "Dropouts tend to come from poor families. They have more siblings, more broken homes, higher levels of parental punitiveness, and lower self-esteem. Their parents also have less schooling."⁴⁶

The survey of Ontario dropouts and graduates carried out for this study by Decima Research further confirms this correlation: 51 per cent of dropouts said their father's occupation was in medium- or low-level production, compared to 37 per cent of non-dropouts. At the other end of the scale, only 22 per cent of dropouts identified their father's occupation as professional/technical/cultural or manager/owner, compared to 36 per cent of non-dropouts. Median family or household income was \$27,030 for dropouts and \$33,180 for non-dropouts.

It cannot be emphasized too vigorously that this correlation does not mean that young people from lower socio-economic status families are innately less intelligent or less endowed with potential to be educated.

Quite the contrary, it appears that the influences of family socio-economic background are a more powerful factor than a student's innate mental abilities.

The Porter study cited above demonstrated, for instance, that students who scored low on mental ability tests but came from families with high socio-economic status were more likely to remain in high school until

the fourth year than students with high ability but low socio-economic status: 79 per cent of the low-ability but high socio-economic status students in the sample remained in school, compared to 71 per cent of the high-ability but low socio-economic status students. Even more dramatic was the comparison between similarly high-ability students in the high and low socio-economic status groups: 93 per cent of the former stayed in school until the fourth year, compared to only 71 per cent of the latter.⁴⁷

This importance of family socio-economic status to educational outcomes can be attributed to a variety of factors.

The home is a vitally important learning environment. As a broad generalization, children of less well-educated parents in lower socio-economic status households tend to receive less intellectual stimulation in the pre-school years. Because the least educated and least sophisticated parents are least likely to read and talk at length to their children in ways that broaden their vocabulary and range of interests, these children tend to arrive at school in a less advanced stage of development than children from families higher on the socio-economic scale.

Secondly, the more educated, affluent and sophisticated the parents, the higher are likely to be the educational expectations they communicate to their children. University-educated professionals, for instance, are likely to take it for granted from the outset that their children will be successful in school and go on to university. Such an assumption is far less widespread among unskilled workers at the opposite end of the socio-economic scale, especially if their children - already hampered by a less advantageous early learning

environment - are not strikingly successful achievers in elementary school.

The support and encouragement children receive with regard to their school work also tends to vary with the socio-economic status of the household. Again as a broad generalization, better educated and more sophisticated parents are more likely to take a direct interest in their children's studies, to supervise homework, to communicate comfortably with teachers, and so on. Even the physical environment is a factor: Because more affluent families generally have more spacious homes, their children more frequently have access to a quiet place to study.

All these factors combine to make it more difficult for socio-economically disadvantaged children to perform well in school from the outset. And then the current practices of the education system itself - notably including ability grouping and the spiral curriculum in elementary school, and streaming and the alienating effects of the credit system in high school - turn those initial disadvantages into self-fulfilling prophecies.

2.) Family Structure

Young people from single-parent households are considerably more likely to drop out than those from homes in which both parents are present.

In the Goldfarb survey carried out for this study, fully 40 per cent of dropouts lived in single-parent households. In the comparison of 700 dropouts and 700 graduates carried out for this study by Decima Research, 29 per cent of the dropouts but only

17 per cent of the high school graduates were from other than two-parent households.

Similarly, the Toronto Board of Education study published in 1985 concluded that "those most likely to continue for four or more years of study come from homes where both parents are present."⁴⁸

Family structure appears to have a considerable effect not only on the decision to drop out, but also on prior academic performance. In his 1986 study of Ontario students, *The Adolescent Experience*, Professor Alan King reports: "The students with both parents in the home are more likely than those living in some other situation to get higher marks, and, correspondingly, less likely to obtain lower marks. Also, students living with both parents are more likely to be enrolled in Advanced-level courses."⁴⁹

In further support of the link between family structure and school achievement, King also quotes an American report which states: "Comparing each non-traditional family type with intact two-parent homes, these investigators have found that children living in mother-only homes are most likely to be children with the broadest range of teacher-assessed problems including conduct, personality or immaturity problems, evidence of socialized delinquency, and psychotic signs."⁵⁰

It is not clear from the available data whether the weaker academic performance and higher tendency to drop out among children from single-parent families is due primarily to lingering trauma from the family break-up itself, or to the ongoing circumstances - including comparatively less available parental time for attention to educational matters - of living with a single parent. Either way, it appears clear that children

from such families are not getting as much individualized attention in school as they would need to compensate for the effects of domestic factors.

3.) High School Streams

Perhaps the most dramatically striking correlation of all is the one between high school stream and the likelihood of dropping out.

While only 12 per cent of students in the highest or Advanced stream leave school before graduation, the dropout rate is 62 per cent among students taking mainly General level courses and 79 per cent among students at the Basic level.

This correlation is made all the more disturbing by the fact that the lower the socio-economic family background of any given student, the lower the course level in which he or she is likely to end up.

A 1982 study by the Toronto Board of Education found, for instance, that 18.4 per cent of students with fathers in the lowest socio-economic status occupational category, and 15.3 per cent of those with fathers in the second-lowest category, were in Basic-level courses in Grade 9. By contrast, only 0.8 per cent of students with fathers in the highest occupational category, and 3.4 per cent of those with fathers in the second highest, were studying at the Basic level.⁵¹

The same study found that 30.7 per cent and 32.6 per cent of students with fathers in the lowest and

second-lowest occupational categories respectively were in General-level courses, compared to 6.4 per cent and 7.2 per cent of students with fathers in the highest and second-highest socio-economic categories.

A whopping 92 per cent of students from the highest socio-economic background, and 87.9 per cent of those from the second-highest, were in the Advanced-level program. By contrast, only 44.9 per cent of those from the lowest socio-economic background, and 46.4 per cent of those from the second-lowest, were in the Advanced program.

The same kind of socio-economic correlation was identified province-wide by Alan King in *The Adolescent Experience*: "Far more children of professionals and executives than children of unskilled workers are enrolled in Advanced-level courses."⁵²

By no means unique to Ontario's experience, this relegation of the less socio-economically advantaged to the lower educational streams appears to be a characteristic of the streaming approach itself.

A recent exhaustive study of streaming - or tracking, as it is called there - in the U.S., by Dr. Jeannie Oakes of the University of California at Los Angeles, concludes: "Tracking separates students along socio-economic lines, separating rich from poor, whites from non-whites. The end result is that poor and minority children are found far more often than others in the bottom tracks."⁵³

An obvious chicken-or-the-egg question arises as to whether the dropout rate in Ontario's General and Basic streams is so appallingly high primarily because the courses in those streams are such that they cannot

sufficiently interest or motivate students, or because those streams are a dumping ground for students who are already weakly motivated or unsufficiently prepared when they arrive in high school. But the answer may ultimately be irrelevant.

What seems abundantly clear is that instead of providing socio-economically disadvantaged children with genuine equality of opportunity by helping them to overcome their initial learning disadvantages, our school system at present has the unintended effect of relegating large numbers of these children to lower tiers of education characterized by low expectations and lack of clearly-defined intended outcomes, from which they are statistically unlikely to graduate and in which they will have learned comparatively little even if they do remain to completion.

4.) Academic Performance

All Canadian and American studies show a strong correlation between learning difficulties and the likelihood of dropping out. Dropouts tend to have lagged behind other students in their accumulation of credits, to have failed one or more subjects and - especially significantly - to be behind their grade level in reading ability.

In the Goldfarb research carried out for this study, 82 per cent of dropouts report having failed at least one subject while in high school, compared to only 50 per cent of non-dropouts. About 30 per cent of

dropouts, and only 7 per cent of non-dropouts, failed a grade while in elementary school or junior high school.

The most problematic subjects for dropouts, by an overwhelming margin, appear to be mathematics and English. The Goldfarb survey found 30 per cent of dropouts reporting that they had failed mathematics while in high school, and 21 per cent reporting that they had failed English. These were followed in order of frequency as failed subjects by science (18 per cent), geography (15 per cent), history (15 per cent) and French (9 per cent).

In the Goldfarb data, 58 per cent of dropouts, but only 14 per cent of graduates, describe themselves as having been fair or poor students in terms of the marks they received in high school. Similarly, in the Decima Research survey carried out for this study, 46 per cent of dropouts, but only 17 per cent of graduates, report having had a grade-point average of C or lower while in high school.

At the same time, however, there is persuasive evidence that a disturbingly large proportion of students drop out even though they were doing quite well in school.

In the Decima survey, 7 per cent of dropouts said they had been A-average students and 46 per cent stated that their average had been B. In the Goldfarb research, 4 per cent of dropouts described themselves as excellent students in terms of marks received, and another 37 per cent said they had been good students. And, of course, the important converse of data cited above is that some 20 per cent of dropouts said they had not failed any subjects while in high school.

Dropouts interviewed several years after leaving school may well tend to overstate the level of marks they received. But other studies, including those involving a direct review of student records, also confirm the existence of a significant number of academically successful students in the ranks of dropouts.

Thus, for instance, a 1974-75 province-wide study of dropouts carried out by the Ontario Institute for Studies in Education reported that 10.7 per cent of the dropouts whose school achievement was analyzed were A or B students.⁵⁴ Similarly, a 1979 study by the Lakehead Board of Education found that 14 per cent of dropouts had been A or B students.⁵⁵

The profile of dropouts in terms of academic performance is consequently a complex one.

On one hand, difficulties in school - in the form of low marks, problems with one or more subjects, and lagging credit accumulation - are a strong predictor of dropping out. On the other hand, analysis of various studies indicates that even by the most conservative estimate at least 40 per cent of dropouts had averages of C or better, and hence were performing well enough to be able to graduate without great difficulty if they had remained in school.

That 40 per cent, it should be emphasized, represents only a minimum estimate of dropouts whose marks were such that they would probably have been academically able to complete program requirements without any major remedial intervention. It seems reasonable to suppose that an additional proportion of dropouts would have been able to meet program requirements with extensive special help in subject areas

where they were experiencing difficulty, and a further proportion might have been able to cope academically in high school if they had arrived from elementary school better prepared.

5.) Part-time Work

While a limited amount of part-time work may be helpful in providing an outlet for students' impatience to get into the workplace and earn money, various studies indicate that a heavy load of part-time work during the school year increases the likelihood of dropping out.

The dividing line seems to be somewhere around 15 hours a week. The more hours in excess of 15 a student works, the greater the likelihood that he or she will drop out.⁵⁶

This correlation is scarcely surprising, since neither the energy nor the available time of students is limitless. If they work long hours every day after classes, they are unlikely to devote sufficient attention to homework and their performance in school consequently suffers. Since the job has meanwhile become at least as much a focal point as school in their lives, it becomes increasingly tempting to escape the pressures and frustrations of juggling school and work by dropping out.

6.) Ethnic Background

On a province-wide basis, the overwhelming majority of dropouts (92 per cent in the Goldfarb data, 90 per cent in the Decima findings) are born in Canada.

Canadian-born students, in fact, appear slightly more likely to drop out than those born abroad. In both surveys done for this study, a smaller proportion of non-dropouts were born in Canada - 83 per cent in the Goldfarb study, and 88 per cent in the Decima research.

According to the Goldfarb data, 80 per cent of dropouts had at least one parent born in Canada, compared to 62 per cent of the sample of graduates. This is consistent with the findings of the 1974-75 Ontario Institute for Studies in Education research which found that 71.6 per cent of dropouts had Canadian-born fathers.⁵⁷

A total of 91 per cent of the dropouts in the Goldfarb study had either English or French as their first language (78 per cent English, 13 per cent French).

In both the Decima and the Goldfarb research, the largest proportion of dropouts identified their ethnic background as English/Scottish/Irish (52 per cent in the Decima study, 42 per cent in the Goldfarb). In both studies, the combined proportion of dropouts citing their ethnic background as English/Scottish/Irish and as French or French Canadian totalled exactly 60 per cent.

While neither ethnicity nor factors related to immigration appear to be key components of the dropout problem province-wide, it is important to note that they may be more significant in Metro Toronto, where there tends to be the largest concentration of recent immigrants.

Even in Toronto, however, the most important factor in this regard appears to be recentness of arrival rather than country of origin.

This conclusion emerges quite clearly from analysis of the findings of a Toronto Board of Education study of the student cohort that started Grade 9 in 1980. Among those immigrant students with a first language other than English or French who had arrived prior to 1976, the dropout rate was virtually identical to that of the cohort as a whole - about 33 per cent; among those who had arrived after 1976, however, the dropout rate was a dramatically higher 53 per cent. Similarly, among immigrant students whose first language was English or French - a category that included students from Great Britain, the U.S. and the Caribbean, the dropout rate among those who had arrived prior to 1976 closely matched the rate for the cohort as a whole - but among those who had arrived after 1976, it was a significantly higher 40 per cent.⁵⁸

Such findings suggest that while students who arrive in Ontario as young children encounter no great difficulties in adapting to our system of education during the elementary school years, we are still far from optimally successful in meeting the linguistic, educational and/or cultural adjustment needs of older immigrant students who are plunged directly into our high schools.

7.) Psychological Characteristics

The Goldfarb research for this study identified a number of characteristics common to a large proportion of dropouts.

The typical dropout, according to Goldfarb Consultants, tends to be non-academic: "If a dropout cannot measure the relevance of a subject, he is likely

to reject it. Subjects that do not illuminate his immediate world are considered a waste of time."

Dropouts tend to be short-range rather than long-range goal setters: "For the dropout, the rewards of work are greater than those of the classroom. This relates not only to the paycheck, but to the fact that at work the employee knows at each stage of job training his degree of progress. The instant feedback is important to the dropout, who does not seem to think in terms of longer-range goals."

The dropout is often a frustrated learner: "Three in five (58 per cent) dropouts say they applied a great deal or some effort to their studies, and 41 per cent identify themselves as performing extremely or reasonably well at the elementary or junior high level. They feel they are, therefore, learners. (But) 45 per cent state they have problems in academic areas. Many complain that it was difficult finding teachers willing to help with academic problems and that often problems were explained in only one fashion, limiting opportunities for improvement and understanding."

Dropouts rank education less highly than other students as a desirable goal: "For them, education is an abstraction, without proven relevance. They tend to come from families where education and career-related subjects were not discussed or promoted."

Dropouts tend to be reward-driven: "The dropout needs constant reassurance that he is doing a job properly. This seems to result in part from years spent improperly understanding a subject, or from the inference that he was not a capable student."

Alienation appears to be a crucial characteristic of dropouts: "The dropout is an alienated learner. He feels neglected in a system that is geared toward the brighter student. He feels alienated from his teachers who, despite claims to teach all students equally, do in fact stereotype their students. (In discussion, they attribute this tendency to stereotype to time demands and class size which makes it difficult to get to know all students.) Dropouts feel like the low man on the totem pole. Support does not come from within the educational system, nor generally from parents."

Dropouts tend to be concrete rather than abstract thinkers: "The dropout in general does not think in abstractions, but in terms that are visible and measurable. He is confused and alienated by concepts that are overly intellectualized, and applies that sense of alienation to the school system in general."

Students who drop out typically have low levels of self-esteem and self-confidence: "The dropout is well accustomed to covering up, to misrepresenting himself. Many feel that they were 'judged by their appearance rather than their ability' and spent years in school acting out other people's prophecies. A significant number felt shamed when they did not grasp an academic concept, and pretended they understood subject areas which increasingly confused them."

Perhaps as a result of this low self-esteem, "a dropout tends to be very grateful for any attention shown to him, and loyal to the person who has bestowed this attention. A caring teacher, therefore, can be a crucial factor in influencing the dropout's view of the value of education."

IV. CAUSES OF DROPPING OUT

There is no way of knowing with certainty to what extent the reasons cited by young people for their decision to drop out are truthful and to what extent they are colored by after-the-fact rationalization. Nevertheless, there is a striking degree of consistency from study to study in the relative importance of the various motivating factors reported by dropouts.

The reasons given by young people for their decision to drop out of school fall into three main categories: school-related, economic and personal.

1.) School-related Reasons

In most major Canadian and American studies carried out in recent years, school-related reasons emerge as by far the most important factor.

The Decima research carried out for this study, for instance, found 43 per cent of the sample of Ontario dropouts attributing their decision primarily to school-related reasons, compared to 27 per cent citing economic reasons and 23 per cent personal reasons.

The Goldfarb research carried out for this study found 45 per cent of Ontario dropouts primarily citing school-related reasons, followed by work-related ones (29 per cent) and personal ones (19 per cent).

In a 1979 Ontario study by Wendy Warren and Alan King, reasons that may be broadly categorized as school-related were cited by 44 per cent of dropouts,

followed by 29 per cent mentioning work-related reasons and 22 per cent citing personal factors.⁵⁹

An almost identical pattern of responses is reported in the U.S. An analysis of the reasons for leaving school given by 5.8 million young Americans who dropped out between 1979 and 1982 found 44 per cent citing school-related reasons, 34 per cent citing personal reasons and 20 per cent citing economic reasons.⁶⁰

It may well be, indeed, that all such statistics still understate the importance of the role played by school-related factors in the decision to drop out. Since dropping out involves making a choice between alternatives, even students who identify some other factor as their prime motivation for leaving are still saying, to one degree or another, that high school did not present itself as attractive, important or satisfying enough to outweigh that other factor.

When a young person reports that he left school primarily because he preferred to go to work or because he had a job offer, for instance, he is reporting that school was in effect weighed against the work option and found wanting. Similarly, a young person who says dropping out was due to "problems at home" is to some extent revealing that the high school environment was unable to provide sufficient support in coping with those problems or in persevering until graduation.

The importance of school-related factors in the decision to drop out means that our current dropout rate does not exist simply because a certain proportion of students come from socio-economically disadvantaged homes, live with

a single parent, are slow learners or have difficulty with English or mathematics. It exists because of what happens when those students come into contact with the high schools as they currently function.

Among the school-related reasons given by dropouts, the ones most frequently mentioned are general dislike, lack of interest, and boredom. Difficulty with particular subjects or with overall course material is ranked far lower as a contributing factor.

Significantly, surveys of teachers and of parents of dropouts in the Goldfarb research produced a similar result.

When high school teachers were asked to state the major cause or causes of the dropout problem, academic difficulties ranked seventh in frequency of mention, behind family problems (mentioned by 39 per cent), behavioral or motivational problems (37 per cent), preference or economic need for work (33 per cent), boredom (28 per cent), belief that school is irrelevant or unimportant (22 per cent), and desire to have a good time, party, etc. (19 per cent); only 15 per cent mentioned academic weakness or difficulty.

The survey of parents of dropouts produced similar results. Boredom (mentioned by 25 per cent), dislike of school (23 per cent) and preference for work (21 per cent) all ranked ahead of academic weakness or difficulty (15 per cent).

Despite the evidence that dropouts do tend to be students who experienced academic difficulties to one degree or another, this suggests that the key factor in

dropping out is not weak academic performance itself. For some students who eventually drop out, the weak performance is a symptom rather than a cause, a reflection of their boredom and lack of a sense of challenge. For others, likely a majority, the crucial factor is their perception of how the system responds to the weak academic performance - with indifference or hostility - coupled with their sense that what they are studying is not worthwhile or interesting enough to justify persevering in the face of difficulties.

There is strikingly clear evidence, in both the Goldfarb and Decima research done for this study, that a sense of having been rejected or ignored by the education system is a key characteristic of dropouts.

Asked in the Goldfarb survey whether "the school system is geared to help someone like you," 35 per cent of dropouts but only 18 per cent of graduates replied, "No." Among dropouts who responded negatively, by far the largest proportion (29 per cent) said they felt this way because of lack of caring or help from teachers. When all dropouts were asked to rate on a 100-point scale their degree of satisfaction with various aspects of the school system, "the degree to which teachers were interested in each student" ranked right near the bottom, with a rating of only 44 out of a possible 100. By contrast, graduates gave teacher interest a rating of 58.

In the Decima research, only 26 per cent of dropouts believed that teachers and school staff had cared a great deal about them, compared to 45 per cent of graduates. Even more disturbingly, 27 per cent of dropouts believed that teachers and staff had cared about them not too much or not at all; only 6 per cent of graduates had this view.

The issue of real or perceived indifference is further highlighted by the reaction many young people report having encountered when they decided to drop out.

Only 37 per cent of dropouts in the Decima research say they discussed their decision with school personnel prior to leaving. But of those who did, only 32 per cent say that the principal, teacher or guidance counsellor made a great deal of effort to persuade them to stay. A total of 41 per cent say not too much (22 per cent) or no (19 per cent) effort was made to dissuade them from dropping out.

In the Goldfarb research, when dropouts were asked what the reaction of their teachers had been to their decision to drop out, the largest proportion (28 per cent) said the teachers didn't care, while another 9 per cent said the reaction had been very or somewhat favorable. Only 24 per cent believed that their teachers had been very opposed to the decision to leave school.

This sense of alienation while in high school appears all the more significant when contrasted with dropouts' perceptions of their elementary school years.

While only 43 per cent of dropouts in the Goldfarb sample characterize the time they spent in high school as excellent (only 6 per cent) or good, 72 per cent of them say their elementary school years were an excellent (27 per cent) or a good period in their school lives. This perception is confirmed by parents of dropouts, of whom a total 85 per cent say their child enjoyed elementary school a great deal (44 per cent) or somewhat. Moreover, a total of 89 per cent of parents of dropouts say that their child did very well (34 per cent) or reasonably well in elementary school.

The effects of the transition to high school are brought into further focus by the fact that when dropouts in the Goldfarb research were asked which grade or grades of elementary or high school they had enjoyed the least, by far the largest proportion - 30 per cent - named grade 9.

From all this, a possible picture of the process that leads to dropping out for school-related reasons begins to emerge.

The final phase of the process starts as soon as the students who will eventually drop out arrive in high school. Many of them are from lower socio-economic status households, in which their early learning experiences were more limited than those of more advantaged children and in which educational expectations are given comparatively less emphasis.

Because of these initial disadvantages - perpetuated rather than overcome by the effects of such elementary-school practices as ability grouping, the spiral curriculum and social promotion - many of them arrive at high school at a less advanced level of knowledge and skills than their classmates. While many of them are in any event relatively insecure and lacking in self-esteem, perhaps as a result of domestic circumstances, the "child-centered" emphasis on self-esteem and affective development has left them believing that they did well in school. They arrive at high school unaware that they have a deficit in knowledge and skills that urgently needs to be overcome.

At the beginning of high school, they are streamed, or stream themselves, predominantly into the general and basic programs. Because these programs lack clarity of purpose, many of the courses are somewhat

boring, unchallenging and seemingly pointless. Teachers - most of whom were themselves the products of the advanced levels of study - regard the general and basic level students from the outset as not very bright or motivated, and approach them with low expectations. The students, meanwhile, have a clear sense of the hierarchy of the streams and recognize that they have been relegated to second- or third-class status.

At the same time, they find themselves in a very different environment from that of elementary school. In place of a class teacher with whom they can develop a relationship, they now have different teachers for every subject and little opportunity for close rapport. Instead of being part of a single social group of classmates, they now must move from room to room and group to group for different subjects. The more shy or insecure among them make few friends and develop little sense of being socially part of the school.

Amidst all these unsettling changes, they also find themselves in a system that is much more performance-oriented than elementary school. There are tests and exams to be written, and assignments to be completed, and they are much less likely than in elementary school to receive sympathy or reassurance if they perform poorly.

All these factors can combine to create a self-perpetuating spiral that American psychologist Roger C. Mills describes this way: "(1) The child encounters stimuli that trigger their conditioned insecure thoughts and feelings. (2) The child begins to function in a more insecure or negative frame of mind. (3) Their perceptions become distorted in a more negative direction. (4) They then respond to situations that arise in a more negative or self-defeating manner. (5) The consequences of this

type of behavior are that the people around them - to whom they are reacting out of insecurity - respond to them with aversion, dislike or in an overly critical, punitive and judgmental way. (6) In turn, these responses, or outcomes of their behavior, provide additional evidence to the child that they are basically unlikeable, that there is really something wrong with them....At some point in this process, the child develops ingrained negative attitudes toward the perceived sources of these experiences. These attitudes stem from an attempt, on the part of a more insecure child, to bolster their self-image or to maintain a semblance of self-esteem. These attitudes and values may take the form of 'all adults are jerks' or 'school is not for me' or 'teachers are trying to make me learn things I don't really need' and so on."⁶¹

In their book *Reaching Marginal Students*, American educators Robert L. Sinclair and Ward J. Ghory describe some of the pre-dropping-out behaviors in school that can result from this sort of spiral.

One such behavior is coasting: "Coasting behavior is adopted by those who do not see school goals as realistically attainable or as meaningful to them, but who elect nonetheless to accept and follow the prescribed means because they are paths of least resistance. These are the students who simply go through the motions with little expectation of success. They sit for tests, but do not finish them; they regularly appear in class, but do not participate; they go to the teacher for help when forced to, but seldom ask questions.... Since their overt behavior is institutionally permitted, their implicit doubting or rejecting of school goals is accepted as an internal decision. Usually little intervention occurs to assist in connecting the pupil's real interests with school. Labelled underachieving or alienated, these

learners are often treated with a casual indifference or 'benign neglect,' which confirms their attitude of passive endurance or their sense of the absurdity of the educational enterprise."⁶²

Another, more dramatic, cycle of withdrawal from school is described by Sinclair and Ghory as retreating: "Retreating students are reluctant to maintain a charade of acceptable behavior. When they can, they reject not only the school's goals but also the available means for learning. The truant, the selective class cutter, the chronically tardy student, the pupils caught smoking in bathrooms or hanging out behind the stairs - these are the young people who withdraw to the margins of situations they see as increasingly absurd or hopeless. Their perceptions are generally confirmed when parents or school officials stigmatize and punish them without providing avenues for productive participation....For students in retreat, the way they feel themselves to be different becomes the most important element of their public identity....The symbols of this new status and identity, such as clothes, speech, posture, and mannerisms, serve to heighten social visibility and to attract further behavior-confirming treatment by peers and by the school."⁶³

Whether it takes such visible forms or is more internalized, a sense of alienation appears to be the key factor in school-related decisions to drop out. Students are turned off by a sense that nobody cares, by the impersonal and bureaucratic structures of today's large high schools, by the lack of a clear sense of purpose or intended outcomes in their programs of study, by the inconsistencies of a system that treats them as adults in some respects and children in

others, by rules and disciplinary measures that they perceive as arbitrary or unfair, and by a perception that they are scorned or rejected rather than helped if they encounter serious learning problems.

Even the complaint that what is taught in school is irrelevant, a frequently-mentioned rationale for dropping out, can best be understood in the final analysis as an alienation-related complaint about teaching methods rather than about subject content. As the report of the Goldfarb research for this study concludes: "While dropouts may complain that the study of history and geography is inconsequential, they also agree that an interesting teacher can bring these subjects to life. Teachers who personalize instruction, who demonstrate the relevance of academic 'esoterica' to these students, are exempt from the demand for career or real-life orientation. A good teacher can make everything seem relevant."

Nearly all young people - not just the dropouts - report experiencing, to one degree or another, the alienating aspects of high schools described above. What distinguishes the dropouts from the graduates is that they are more vulnerable and less able to cope with these negative characteristics of the school system because they live in troubled or confidence-eroding households, because they are particularly sensitive or insecure, because they are experiencing academic difficulties they do not know how to overcome, or for a variety of other reasons.

As University of Wisconsin researchers Gary Wehlage and Robert Rutter put it: "If one comes from a low socio-economic status background, which may signify

various forms of family stress or instability, and if one is consistently discouraged by the school because of signals about academic inadequacies and failures, and if one perceives little interest or caring on the part of teachers, and if one sees the institution's discipline system as both ineffective and unfair but one has serious encounters with that discipline system, then it is not unreasonable to expect such individuals to become alienated and lose their commitment to the goals of graduating from high school and pursuing more education. The process of becoming a dropout is complex, because the act of rejecting an institution as fundamental to the society as school must also be accompanied by the belief that the institution has rejected the person."⁶⁴

2.) Work-related Reasons

Except for the comparatively small proportion (3 per cent in the Decima sample, 10 per cent in Goldfarb) of dropouts who say they left primarily because of financial need to get a job, the work-related reasons for dropping out involve choice rather than necessity.

At the same time as they feel rejected or frustrated by school, young people feel invited or attracted by the work place, which to them represents adulthood, money and freedom.

As the Goldfarb research for this study puts it: "Work, for the dropout, means money and hence independence, direct feedback, and tangible and intangible rewards for a job adequately done. The work place invites, where the schoolroom disinvites."

The lure of the work place is not difficult to understand, when one considers the rather artificial

nature of the stage of life our society calls adolescence. A report of the OECD's Centre for Educational Research and Innovation summarizes it this way: "Young people are caught in a kind of no-man's land, where there are neither children nor adults, but where one must be both child-like and adult-like at the same time. On the one hand, they are told to experiment and be free before the responsibilities take hold. On the other, they are chastised for being irresponsible, for not recognizing the seriousness of their behavior....The creation of physically segregated forms of schooling and the more general age segregation in modern societies have largely shut young people off from those places where infants and adults are found: the home, with fewer siblings and where more working parents are away for most of the day; the world of work, which non-workers have little access to."⁶⁵

Particularly if they find the school itself an alienating or unsatisfying environment, it is not surprising that many young people are impatient to escape this state of limbo that adolescence represents. Returning to childhood obviously is not an option; accelerating their entry into the full-time work force, and hence into self-perceived adulthood, is.

This lure of the work place is made all the stronger by what many young people believe to be a crucial difference between education and employment. Education by its nature requires constantly learning new things - as soon as one challenge has been successfully or unsuccessfully confronted, a new one is presented. By contrast, they see employment as a matter of learning one task or set of tasks once and for all, then settling back and being rewarded with money for carrying them out.

It is also understandable that the attraction of the work place is so much stronger for students in the general and basic streams. In addition to the lower socio-economic status - and hence lower family-inspired career expectations - with which placement in these lower streams coincides, the streaming itself conveys a powerful message. These students know they are perceived to be of limited potential, and few of them long retain any real expectation of going on to post-secondary education. Unless they have reason to believe that remaining in high school until graduation will guarantee them major advantages in the work place, consequently, they see little reason for postponing their passage into adulthood.

Because of growing skepticism among employers as to the level of knowledge and skills a Secondary School Graduation Diploma (SSGD) certifies, as discussed earlier, those guarantees of employment advantage are not always readily evident.

As Queen's University researcher Alan King put it in 1980: "It appears that the completion of an SSGD does not increase substantially the possibility of a school-leaver obtaining a job with a career prospect. The SSGD is used as often by employers to reduce the number of applicants for a job as it is to differentiate among the applicants in skills and knowledge.... Employers have learned to expect little from incoming workers and have made the necessary accommodations."⁶⁶

On the whole, consequently, work-related reasons for dropping out are not entirely separate from school-related reasons. They can more realistically be seen as two sides of the same equation: The strong drawing power of the work place is inversely proportional

to the weak holding power of the high school as it currently functions.

3.) Personal Reasons

Personal reasons for dropping out include everything from problems at home to emotional difficulties to ill health.

Pregnancy was cited as the main reason by 14 per cent of the female dropouts in the Decima sample and 12 per cent in the Goldfarb survey.

Problems at home are the most frequently cited personal reason for dropping out. In some instances, family break-up, domestic conflicts or death or illness of a close relative so upset or distract a student that school work suffers badly, he or she becomes demoralized, and drops out. In other cases, conflicts with parents, or perceived need to escape a turbulent or abusive household, impel a student to leave home; the resulting need to be financially self-sufficient causes him or her to drop out.

While such reasons are not directly related to the workings of the school, the possibility remains that a more responsive and supportive, and less impersonal, school environment might help at least some additional students in such situations to cope with their problems without dropping out.

V. EDUCATIONAL AFTERMATH OF DROPPING OUT

While some educators argue that it may be a good idea for unmotivated students to drop out and then return when they have matured, the statistical evidence shows that it doesn't work out that way.

Dropouts often do talk about returning to school, but fewer than half of them actually attempt a return - and the harsh reality is that graduation is seldom the result.

Only 18 per cent of the dropouts in the total Decima sample and 14 per cent of those in the Goldfarb reported subsequently completing their high school education.

Every effort should, of course, be made to encourage people who have already dropped out to return, and to facilitate their doing so.

But as the Decima report concludes: "The data are very clear on what should not be done. To simply allow students to drop out in the expectation that most of them will eventually return to high school is clearly a false assumption. The prevention of dropping out is the only way of ensuring that students will in fact complete high school."

VI. POLICY RESPONSES TO THE DROPOUT RATE

Vital as it is to reduce the dropout rate, there is reason to be profoundly skeptical that dropout prevention programs as such are likely to produce dramatic results.

For one thing, any such programs must necessarily be a shot in the dark. There still is no satisfactory evidence as to what specific initiatives work best.

In the U.S. in recent years, dropout prevention has become a growth industry. Reams of research papers have been written. An ever-growing array of federal, state and local initiatives is being implemented. And yet the overall dropout rate appears to have changed little over the past 25 years.

Reviewing the situation in a 1986 report to Congress, the U.S. General Accounting Office concluded: "Based on our review of the evaluation literature and other literature summaries, it is not generally known 'what works' in terms of specific interventions to prevent youth from dropping out of school, encouraging their re-entry, or recruiting and retaining them in 'second chance' employment and training programs. This is due in part to limitations of data available on programs and limitations in research and evaluations seeking to determine the effectiveness of particular approaches."⁶⁷

Columbia University Teachers College expert Dale Mann reports a similar conclusion: "What have we learned? First, people feel that too many students leave school without graduating. Second, students are impelled to do that by a wide range of circumstances. Third,

practical improvements depend on knowing what was done to whom, but (a) virtually everything is being done and (b) at the delivery level we cannot yet tell to whom and with what effect. Thus, we are doing a lot and learning a little about the multiple palliatives."⁶⁸

A number of factors help to explain this lack of clear information.

Deficiencies in the statistical data base on dropouts, first of all, have made it difficult to produce reliable "before-and-after" evaluations of the efficacy of various programs.

There also is no way of knowing with certainty whether the identification of any given student as a potential dropout was correct or whether that particular student actually would have gone through with dropping out in the absence of a special program.

And, perhaps most significantly, it also is unclear whether the apparent success of any given dropout prevention program is due to the particular characteristics of that program or simply to the fact that it results in individualized attention - any attention - being paid to students who would otherwise feel more alienated.

If lack of conclusive data as to what works were the only problem, the need for skepticism about dropout prevention programs as such might still be limited. There are, after all, various indications - even if only anecdotal in some instances - that certain types of approaches seem to work better than others. It is not impossible, consequently, to structure various dropout prevention programs on the basis of current knowledge and hope that they will do some good. But there are more

fundamental reasons for uneasiness about such an approach.

Specific dropout prevention programs all entail identifying students who appear to be "at risk" of dropping out and then providing them with special attention of one kind or another. But if one-third of students are actually dropping out, then surely at least half of the total student population must be "at risk" of doing so, since risk does not become reality in every instance.

Are we, then, to have a two-tiered system of education in which half of our students are to receive special attention aimed at keeping them motivated and ensuring that they are learning successfully, while the other half are deemed capable of fending for themselves? If so, can we really be confident of our ability to determine which students belong in which half? Not all students who drop out, after all, neatly fit a pre-determined profile, and not all students who fit such a profile actually drop out or even contemplate doing so.

The inadequacy of such a selective approach becomes all the more apparent when one considers the characteristics of those dropout prevention programs that do appear to show signs of success. Those characteristics are described with a remarkable degree of consistency by a broad variety of researchers.

They are summarized by University of Wisconsin researchers Gary Wehlage and Robert Rutter as follows: "The evidence from case studies of effective alternative programs for marginal students indicates that such students respond positively to an environment that combines a caring relationship and personalized teaching

with a high degree of program structure characterized by clear, demanding, but attainable expectations."⁶⁹

Similarly, U.S. psychologist Roger C. Mills points out: "In national studies of dropout prevention pilot programs, several interesting results were found to be consistent across programs. Teachers who were able to reach high-risk youth were found to be consistently up-beat, empathic, and to consistently treat these youth with high levels of respect and regard. They were consistently supportive and confident of the child's ability to learn. They actively involved students in their own learning, and were not afraid to be creative in the classroom."⁷⁰

And in the report of his massive study of American high schools, Ernest L. Boyer of the Carnegie Foundation for the Advancement of Teaching sums up his findings regarding dropout prevention initiatives this way: "At the heart of every effort that appeared to be succeeding, we noticed that there was a close relationship between a student and a counsellor or teacher - there was a mentor with high standards and clear goals, one who had gained the student's confidence and trust."⁷¹

A clearly conveyed sense of caring on the part of teachers, individualized help with problems of learning or coping, a purposeful and structured program, demanding and clearly-defined expectations - if those are the characteristics of programs that seem to help potential dropouts to stay in school, are they not indeed the characteristics of approaches that would help all students to obtain a high-quality and satisfying education?

It seems ironic that students should have to show signs of preparing to drop out - or, in fact, drop out and then be enticed back to a special program - before they can obtain ready access to the teaching methods and attitudes that are known to be most effective.

Beyond these reasons to be wary about reliance on special dropout prevention programs, there is another, even more fundamental concern: If the current structures and approaches of our educational system are such that they leave large numbers of students alienated, unmotivated and/or academically disadvantaged or frustrated, then superimposing dropout prevention initiatives onto those structures and approaches can at best be a limited palliative.

If large numbers of students arrive from elementary schools with serious deficits in knowledge or in reading or learning skills, even the most caring teachers are going to have difficulty helping them to cope with the high school program.

If the general and basic streams are inherently unsatisfying and lacking in clarity of academic purpose or intended outcomes, even the most vigorous efforts to persuade students in those streams of the importance of staying in school are likely to fall on deaf ears.

If students perceive that graduation from high school provides little hope of employment with a career prospect because employers are increasingly mistrustful of the level of knowledge and skills that graduation certifies, even the best individualized attention will not persuade those students to work hard at meeting the requirements for graduation.

The best hope for addressing the dropout problem in a meaningful way, consequently, lies not in focussing on potential dropouts but in focussing on our system of education and strengthening it in areas of current weakness. Some strategies for doing this will be proposed in Part Three of this report.

Nevertheless, it is unavoidable that such a systemic approach would take some years to implement. Rather than stand idly by and watch tens of thousands of additional students drop out each year in the interim, it makes sense to attempt a short-term dropout prevention strategy - but only in the full realization that such a strategy is at best a stop-gap measure, not a real solution, and that it is likely to have quite limited success.

The great risk inherent in a short-term dropout prevention strategy is that it might become a substitute for addressing the fundamental need for improvement in our education system. To accept such a substitute, or even to delay addressing the fundamental issues in the name of first assessing the effects of dropout prevention initiatives, would be tragically myopic. It would be a disservice not only to the many students who would not be dissuaded from dropping out by special programs superimposed on current approaches, but also to graduating students who are receiving a less than optimal education and to our society as a whole.

It is therefore recommended:

6. That the Ministry of Education proceed with any specific dropout prevention initiatives only on the understanding that they are a stop-gap measure to be undertaken strictly in conjunction with, and not as a substitute for, urgent progress in addressing fundamental issues in our elementary and secondary systems of education.

Given what we know about the causes of dropping out, at least three main elements of an interim strategy appear obvious: communication, efforts to reduce the alienation of individual students, and academic and personal help.

A communication effort is essential, especially in view of the mixed messages that the education system has been giving less academically successful students. There is no substitute for telling young people and their parents - forcefully, persuasively and often - that the realities of today's world require them to stay in high school until graduation if they are to avoid paying a price for the rest of their lives.

This message should be delivered province-wide through a sophisticated and sustained advertising campaign using a variety of media including television, posters in schools, ads at bus-stop shelters, videos shown at school assemblies, and so on. Themes should include factual information about the current situation - income levels, unemployment rates and career prospects of dropouts compared to graduates - as well as explanations of why education will become ever more important in our changing economy.

At the local level, in addition, schools and/or school boards should communicate directly with parents to explain in more detail the importance of encouraging their children to stay in school until graduation and to urge them to contact the school if their children are contemplating dropping out or are experiencing other problems.

Apart from the details of the messages themselves, such an advertising campaign could play a significant psychological role by providing a concrete demonstration to students - and, for that matter, to their teachers - that the system cares whether they stay or go. In view of the strong role that perceptions of adult indifference seem to play in the decision to drop out, such a demonstration could be important.

It is therefore recommended:

7. That the Ministry of Education conduct a major and sustained advertising campaign, using television and other media including posters in the schools, to emphasize to students and their parents the importance of remaining in high school until graduation.

and

8. That, in addition, all school boards be required to conduct advertising and communications campaigns urging parents to encourage their children to stay in high school until graduation and to contact the school if their children are contemplating dropping out or are experiencing other problems.

In seeking to address the alienation, academic difficulties and personal problems that impel students to drop out, it would best - for the reasons outlined above - to avoid trying to identify and target specifically those students who are "at risk" of dropping out.

To reduce the risk of stigmatizing students and creating self-fulfilling prophecies on one hand, and of missing students who don't neatly fit the profile of a potential dropout on the other, it is preferable to aim more broadly - to direct special attention to all students who show signs of being at risk of not learning successfully, of not being comfortably integrated into the school environment, or of having trouble coping with problems of any kind.

When all is said and done, there is only one way to reduce alienation: replace or supplement impersonal relationships with personal ones.

As Robert Sinclair and Ward Ghory write in their book, *Reaching Marginal Students*: "Teaching and learning too often becomes a detached transaction. When curriculum becomes a disinterested business and the schools become an anonymous setting for both adults and youth, no amount of emphasis on revised curriculum standards will achieve quality and equality. Personal attention, support and recognition must be revived if conditions for learning are to be renewed."⁷²

Except where individual schools or teachers happen to make an exceptional effort, the current structure of high schools tends to preclude that vital personal contact.

Under the credit system, each student has as many as eight different teachers a year - one for each

subject. Each of those teachers may have a total of 100 or more students in different classes.

Except in those high schools that put a strong emphasis on the "home room" approach, consequently, every student is quite literally on his or her own: There is no one teacher or school official specifically responsible for monitoring the student's progress across the range of subjects, for noticing if the student exhibits signs of academic or personal difficulties, or for bringing any such problems to the attention of other teachers to ensure that the student is treated in a coordinated and consistent manner.

What is especially disturbing about this laissez-faire approach is that the students who are most likely to be overlooked are precisely those who need attention the most - the withdrawn, alienated students who lack self-confidence and who doubt that anyone cares about them, and hence who are least likely to take the initiative in approaching a teacher to discuss their difficulties or doubts.

As an absolute minimum, any serious attempt to reduce the alienation that is a major cause of dropping out must begin by providing every student with an assured and regular relationship with at least one caring adult within the school system.

At least until the fundamental problems created by the workings of the current credit system have been addressed, those relationships will necessarily have to be "artificially" created within each school.

The most elementary of those necessary relationships is one of general monitoring and supervision.

Whether it be done through a "home room" system or simply by assigning each teacher a certain number of students to watch over, every student without exception in Ontario's high schools should have one teacher who is responsible for monitoring his or her progress in all courses, for identifying any sign that he or she is encountering academic or personal difficulties, and for initiating appropriate interventions to assist him or her in coping with any such difficulties.

The monitoring teacher should be aware of the student's academic and personal background. All other teachers should provide the monitoring teacher with the student's test and assignment results on an ongoing basis. They should also promptly inform this teacher of any problems with attendance, class performance or attitude, and particularly of any sudden change in any of these areas.

By functioning as a "clearing house" for all this information, the monitoring teacher should be able to spot any pattern that indicates the student is having trouble and needs help. It would then be this teacher's responsibility either to personally intervene as needed with the student, or to bring the situation to the attention of other appropriate members of the school community and to ensure that the necessary follow-up takes place.

The province-wide implementation of such a system is imperatively needed, even apart from its importance to the dropout issue. It is intolerable, and indefensible, that young people are being cast adrift in

the school system without the assurance that even a single adult member of the school community is taking any interest in their individual fate.

It is therefore recommended:

9. That all high schools in Ontario be required to assign every student to a teacher who will be responsible for monitoring that student's progress in all courses, for promptly identifying any signs of academic or personal difficulties, and for initiating interventions as appropriate to assist the student with any such difficulties.

Beyond such monitoring from a distance, students also need an individualized personal relationship with at least one member of the school community whom they can perceive as caring about them and to whom they can turn for advice and support - that is, they need mentoring.

Virtually every major analysis of meaningful responses to the dropout problem cites the critical importance of the mentor function. There simply is no substitute for providing young people, at a challenging and stressful time in their lives, with a caring, supportive and motivating one-to-one relationship within the school.

Optimally, every high school student should have a weekly half-hour session with a mentoring teacher to discuss academic progress, set and review objectives, and talk about how to handle school-related or personal problems that may be troubling the student.

Because the mentoring relationship by its nature must be a positive rather than a hostile one to be effective, a reasonably good fit between student and mentor is essential. In instances where there is a personality clash or the student just does not relate well to a given mentor, neither ego nor bureaucratic convenience should take precedence; the student should be reassigned.

Unfortunately, because mentoring is a time-consuming and therefore costly activity, the optimal goal of giving every student a half-hour session with a teacher every week may not be readily attainable.

At the very least, however, this sort of personal attention appears inescapably necessary for those students who are most vulnerable and in need of support because of their academic and/or personal circumstances.

It is here that what is known about the most common characteristics of dropouts may have to be brought into play to establish priorities, despite this report's previously-stated reservations about trying to identify students "at risk" of dropping out.

The more of the following characteristics a student has, the more urgent should be considered his or her need for a mentoring relationship to help offset serious disadvantages: low socio-economic status family background; single-parent household; streamed into the general or basic program; a history of failure or difficulty in one or more subjects; problems with reading; lagging in credit accumulation; behavioral or discipline problems; a pattern of absenteeism and/or failing to complete assignments.

Mentoring should not, however, be restricted to students exhibiting all or most of these characteristics; preventive help at an early stage is likely to be far more effective than waiting for all these factors to accumulate into a full-scale crisis. Indeed, a case can be made that students with even one of these characteristics are badly in need of personal attention.

In a typical high school with 1,200 students and some 65 teachers, providing the most vulnerable one-third of students with a weekly half-hour of mentoring would require an extra three to four hours a week of each teacher's time. That is not inconsiderable, and it might require the hiring of some additional teachers to lighten the overall load, but it does not appear unmanageable.

Other, less optimal but still very useful, mentoring arrangements might be possible for at least some of the students who did not receive priority under this approach: Effective mentoring roles can be played, for instance, by volunteers from the business community, by older high school students invited to help younger ones, by college students, or by retired teachers.

It is therefore recommended:

10. That all high schools be required to provide regular weekly individual mentoring sessions with teachers at the very least for students whose background or academic characteristics indicate a risk of dropping out, and that mentoring also be provided to other students to the maximum extent made possible by recourse as necessary to qualified mentors from the community at large.

For students who have arrived in high school with serious deficits in knowledge or skills, or who are encountering learning difficulties in one or more subjects, the need goes beyond monitoring and mentoring. If they are to remain in school until graduation rather than become frustrated and drop out, they must have remediation.

Though they are undeniably costly to provide, effective remediation services in the high schools are inescapably necessary if there is to be a genuine commitment to helping students stay in school until graduation.

Through no fault of their own, some students need more individual coaching than others to come to grips with a given subject, need encouragement to regain confidence in their learning abilities, or have a learning style that does not match their teachers' style of instruction. They cannot simply be abandoned to fend for themselves, as too often appears to be the case at present.

It is therefore recommended:

11. That all high schools be required to provide high-quality remediation and tutoring services for students who are experiencing academic difficulties.

As discussed earlier, the school-related problems of many young people - especially those from lower socio-economic status backgrounds - often reflect, or are compounded by, difficulties in their personal lives.

Such difficulties - ranging from financial need to a troubled or abusive home environment to health or emotional problems - are often beyond the capacity of the high school to address directly. But because such difficulties frequently affect attitudes and performance in school, and hence the tendency to drop out, an effort to reduce the dropout rate would do well to go beyond accepting them as an inescapable fact of life.

While high school personnel themselves may not be in a position to deal extensively with such problems, the high schools could provide a setting in which young people could easily come into contact with the appropriate experts who can help.

An initiative undertaken by the New York City Dropout Prevention Program is interesting in this regard. The program has contracted with community-based social agencies to establish teams of four or five human service workers in offices within each participating school.

Acting in the social work tradition, team members act as case-managers for at-risk students who are referred to the offices by other school personnel or who come of their own initiative. Services provided by the teams - either directly or through their links to appropriate assistance agencies within the community - include crisis intervention, family counselling, economic and social counselling, help with psychological or emotional problems, and advocacy within the school or community.

Because the experts in these offices are outsiders rather than part of the authority structure of the school, troubled young people find them less threatening to deal with and tend to be less skeptical about approaching them for help.

As Dr. Victor Herbert, superintendent of the New York City Dropout Prevention Program, explains it: "The case-management approach is very important for at-risk students who are known to have a very difficult time establishing one-on-one relationships with adults. By providing concrete help in dealing with institutions and relationships that seem remote and threatening, case managers model a trusting adult/teenager relationship which boosts self-esteem and self-knowledge."⁷³

Such offices might not be needed or appropriate in every Ontario high school. But in communities where social, economic or domestic factors appear to play a considerable role in the dropout problem, they are an approach worth exploring.

It is therefore recommended:

12. That consideration be given to contracting with community-based social service agencies to locate teams of appropriate professionals within high schools to provide troubled young people with ready access to services such as crisis intervention, family counselling, economic and social counselling, and help with psychological, emotional or medical problems.

Because more than one out of every 10 female dropouts cites pregnancy as the main reason, this is an issue that ought not to be ignored.

A great many factors related to pregnancy or to caring for a baby may contribute to the decision to leave

school, but certainly one of the most obvious is child care. If a teenaged mother has nowhere satisfactory to leave her baby while she is in school, dropping out becomes unavoidable.

A few high schools already do provide some form of child care for their students, but more can and should be done.

It is therefore recommended:

13. That every school board be required to provide infant-care and child-care facilities for students in at least one of its high schools or - in areas where the need is insufficient to justify in-school facilities - to provide students with fully subsidized and accessible infant-care or child-care arrangements outside the school.

Despite all such initiatives to reduce the dropout rate, many students will still decide to leave before graduation. They should not simply be written off the moment they do.

Even though the odds of success may not be great by that stage, the education system nevertheless has an obligation to make contact with such students to explore their reasons and to urge them to reconsider.

It is therefore recommended:

14. That all high schools be required to make contact, normally through the monitoring or mentoring teacher, with

all students who drop out during the school year or who fail to return in the fall, in order to establish the reasons for their decision, to make a genuine effort to persuade them to reconsider and, if that fails, to explain the opportunities for return at a later date.

These initiatives together should help to save the educational futures of at least a limited number of young people who would otherwise drop out. For a great many others, whether potential or eventual dropouts or not, they will help to make high school a somewhat less cold, impersonal and seemingly indifferent place; that alone makes them worth implementing.

But in their emphasis on keeping disaffected students from dropping out, these measures all deal with the symptoms of serious shortcomings in our current system of education rather than with those serious shortcomings.

To content ourselves with implementing such initiatives and seeing some modest reduction in the dropout rate would be as shortsighted as taking Aspirin for severe and lasting pain, being satisfied with slight relief from the discomfort, and failing to identify and treat the underlying problem.

It is to suggesting some responses to those underlying problems in our elementary and secondary systems of education, outlined in the preceding sections, that the final part of this report will be devoted.



PART THREE:REAFFIRMING OUR SENSE OF PURPOSEI. OVERVIEW

The wellbeing of our children and of our society as a whole requires us, as discussed in Part One of this report, to update and reinvigorate the philosophy of education in Ontario. But education is ultimately not an abstract, philosophical exercise but a very real and practical one.

Philosophical renewal will be meaningful only if it is translated, with a real sense of urgency, into concrete changes in the ways our schools function and our children are taught.

If we accept the fundamental premises suggested here - that a relevant elementary and secondary education in today's world must entail the demonstrable acquisition of specific knowledge and skills, that it should be a vital goal of public policy to have all our young people successfully obtain such an education, and that our schools should be responsible not merely for teaching but for doing everything possible to bring about learning - then some of the practices that require rethinking and change become readily apparent.

In contemplating opportunities for renewal and improvement, it is important to think of the education system as a continuum that stretches from earliest childhood through post-secondary institutions and into the adult world of work. As we are so often reminded, education and learning in today's rapidly-changing world are not finite but life-long endeavours for which the

elementary and secondary school years are vital preparatory stages.

At every point along this continuum there are opportunities, and needs, for beneficial change.

II. THE PRE-SCHOOL YEARS

By the time children arrive in first grade, their educational futures have already been shaped to a significant degree by early learning experiences.

The evidence is incontrovertible that children from middle- and upper-income-level households with reasonably well-educated parents generally tend to come to school at a more advanced stage of intellectual development than those from families with the lowest socio-economic status.

A variety of factors may account for this, including relative lack of intellectual stimulation and learning experiences; lack of a stress-free and nurturing environment; sub-optimal nutrition and health care; lack of outdoor playing space and of stimulating toys; instability and insecurity caused by frequent moves in search of affordable housing; poor self-image among family members, and so on.

Whatever the causes of disadvantaged intellectual and/or emotional development among children from the lowest socio-economic groups, the reality of this disadvantage may well be a more critical factor than innate ability in determining performance in school.

For this reason, the attempt to bring all children to successful completion of at least a meaningful secondary education should begin in the early pre-school years.

Various "Head Start" programs and other experiments in the U.S. have clearly demonstrated that the educational disadvantages of coming from a low

socio-economic status household can be overcome to a considerable degree by providing such children intellectual stimulation and learning experiences outside the home, in the form of pre-school compensatory education.

One of the best-known tests of this approach, the Perry Pre-school Program, was conducted in Ypsilanti, Michigan, with socio-economically disadvantaged black children born between 1958 and 1962. Almost all the children involved were tracked to age 19 and compared with a matching group of children who had not been involved in the program. The differences were striking.

While only 49 per cent of the children outside the program had achieved high school graduation or an equivalent, among the pre-school group the graduation rate was 67 per cent. Similarly, while only 21 per cent of the children who had not been enrolled in the program went on to college or vocational training, 38 per cent of those who had been in the program did so.

The benefits of the pre-school program were not limited to academic performance. Only 31 per cent of those in the program had ever been detained or arrested, compared to 51 per cent of those outside it. Similarly, 50 per cent of the pre-school group were employed, compared to only 32 per cent of the others. Only 18 per cent of the pre-school group were receiving welfare assistance, compared to 32 per cent of the others.⁷⁴

Because the socio-economically disadvantaged in Ontario are not visibly concentrated in low-income ghettos as they are in the U.S., such a targeted "Head Start" approach would be considerably more stigmatizing for the children singled out here for involvement in a special program.

At the same time, the need for deliberately provided early learning experiences and intellectual stimulation outside the home may no longer be limited to children from the most obviously disadvantaged households.

Given the growing incidence of both parents working outside the home and the scarcity of high-quality day care, numerous children of non-needy and relatively well-educated parents are spending much of their time in sub-optimal care arrangements that do not provide the fullest opportunities for early development.

For this reason, as well as to avoid needless stigmatization, it is preferable to avoid a narrow focus in pre-school education. Instead, an important opportunity is suggested by the convergence of three factors: the increasingly acute shortage of high-quality affordable day care, the increasing availability of space in the schools due to declining enrollments, and the growing recognition of the importance of pre-school learning experiences in determining later school performance.

Rather than viewing day care shortages and pre-school education as separate issues, the two should be combined by making early childhood education available free of charge in public and separate schools province-wide for all children at the age of three.

The availability and importance of such education should be vigorously promoted, and particular efforts should be made to urge parents in the lowest socio-economic groups to take advantage of this opportunity for their children.

Such early childhood education should be voluntary at present. But once a fully-established universally accessible system of early childhood education is in place, and as the proportion of parents working outside the home continues to grow, it may be appropriate to consider progressively lowering the mandatory enrollment age.

It is therefore recommended:

15. That all school boards in Ontario be required to provide universally available early childhood education in public and separate schools for children from the age of 3.

and

16. That the Government of Ontario provide appropriate financial assistance to the school boards for the provision of such early childhood education.

and

17. That the availability and importance of early childhood education be vigorously publicized to parents, with special efforts devoted to encouraging parents in the lowest socio-economic status groups to take advantage of this opportunity for their children.

III. THE ELEMENTARY SCHOOLS

Even more than the high schools, our elementary schools play a decisive role in determining the life-long educational fates of our children.

It may be no exaggeration to say that by the time a young person reaches high school, the die has already been cast. If it has been cast to his or disadvantage, it will take extraordinary efforts in high school to change the outcome.

It is in elementary school that young people learn or do not learn the fundamental skills - reading, writing, articulate speech, numeracy, clear thinking, effective learning methods, and so on - on which their ability to handle the secondary school program will depend.

It is in elementary school that young people develop or do not develop the behaviors and attitudes - attentiveness, concentration, perseverance at tasks until successful completion, pursuit of excellence and pride in meaningful achievement, confidence in their ability as learners, willingness to seek and accept help when needed, and so on - that are vital for success in high school and beyond.

It is in elementary school that they acquire or do not acquire the basic knowledge that they need and are expected to possess as a foundation for further learning.

And it is in elementary school, at present, that they are categorized as achievers or non-achievers in ways that largely determine their streaming in high

school and hence their likelihood of dropping out, graduating or going on to post-secondary education.

Against this background, the whole focus of the elementary schools on process rather than outcomes, as discussed in Part One of this report, urgently needs to be rethought.

1.) Assumptions Regarding Children's Potential

As part of the preoccupation with children's self-esteem that has characterized educational thinking in Ontario since the days of the Hall-Dennis Report, it has been assumed that dramatically different levels of academic ability are a given and that it would therefore be damaging to try to bring all children to any given level of achievement.

Only in the case of children diagnosed as having a specific learning disability is it readily accepted that academic performance can be improved by special attention or special teaching methods.

If a child is merely regarded as "slow" or "not academically inclined" or "not ready," that tends too often to be accepted as a fact of life to be accommodated by lowering expectations and demands, not as a pedagogical challenge to be overcome. If a child is a mediocre learner, in short, it ultimately must be the child who is somehow deficient - not the teaching method.

Especially in view of what we know about the effects of socio-economic background on academic performance - though not on innate ability - that can often be a tragic misjudgment for which the child will pay consequences for the rest of his or her life.

Being left to accumulate a deficit in essential knowledge and skills in elementary school causes a child to be streamed into the basic or general programs in high school. Being streamed into the basic or general program makes a child, statistically, considerably more likely to drop out than to graduate. Dropping out - or, for that matter, graduating still deficient in essential skills and knowledge - consigns a young person in today's economy to a life of low-paying dead-end jobs, considerable and increasing likelihood of unemployment, and in general drastically curtailed opportunities to participate fully in our society.

None of this implies that the education system or individual teachers have been deliberately or cynically limiting children's prospects. Quite the contrary, current approaches were born out of the best and most supportive intentions, at a time when it was believed that everyone could find a satisfying place in society with relatively little regard to what he or she actually knew.

But how, in today's circumstances, can we justify continuing to delude ourselves that we are doing children a favor when we lower learning requirements to match their perceived levels of ability, and thereby send them onward from elementary schools with lower levels of knowledge and skills than they need to have a reasonable chance of success for the rest of their lives?

Such an approach makes sense only if we believe that vast numbers of our children - for the most part, those who come from financially disadvantaged families - are for all practical purposes really uneducable.

If that is to be our belief, we cannot escape confronting its implications.

Under such a view, the concept of universal education would have to be recognized as a sham - a fiction contrived to disguise a reality of meaningful education and successful outcomes for a little more than half our children, and in-school busy-work and the virtual certainty of unsuccessful outcomes for the rest.

Under such a view, the pursuit of equality of opportunity for our children would have to be abandoned as hopeless, and replaced by acceptance that the children of the socio-economically disadvantaged must grow up disadvantaged themselves because they are pre-destined to be under-educated.

And under such a view, the hope of continuing prosperity for our society in an increasingly competitive world would have to be dismissed as wishful thinking, rendered unattainable by the consequences of having much of our work force under-educated, incapable of adaptation and increasingly unemployable.

But such a view would surely constitute a needless counsel of despair. There is every reason to believe that with all the educational techniques and expertise available today, all children except the retarded or otherwise insuperably disabled can be brought to the level of knowledge and skills our society regards as the necessary outcome of a meaningful high school education.

The reality is that we have never really tried to do this, because we have never believed we had to.

Now the time has come to recognize that the need is inescapable and to make the attainment of meaningful educational outcomes for all children an absolute priority of public policy in Ontario.

As The Paideia Proposal, a 1982 report prepared by a group of leading American educators headed by Mortimer J. Adler, puts it: "We once again express our faith that there is no uneducable child - no unteachable child. There are only children that we fail to teach in a way that befits their individual condition. That faith rejects with abhorrence the notion that there are any irremediable deficiencies to block the attainment of the same educational goals for all....Children who, in one way or another manifest deficiencies that would result in their not achieving the requisite standard of performance must be given special help to overcome these deficiencies. That help would be truly remedial - remedying individual deficiencies that can and must be overcome."⁷⁵

It is therefore recommended:

18. That policies and practices in Ontario's elementary schools be founded on the premise that all children, except those with specific and insuperable mental or physical handicaps, can be brought to a common necessary level of knowledge and skills through the application of appropriate pedagogical techniques.

Translating this premise into action requires rethinking at least three current practices derived from the belief that it is wrong or damaging to try to bring children to a common level of accomplishment: ability grouping, the spiral curriculum and social promotion.

The combined effect of these three practices is to make it possible for children to be passed from teacher to teacher, from year to year, without anyone

ever having to be responsible or accountable for bringing them up to any standard of knowledge or skills.

2.) Ability Grouping

As early as Grade One, the practice in some schools is to divide the children in a class into ability-based groups for instruction in such subjects as reading or mathematics.

The children deemed less able or less mature are very often those who, because of their less advantaged family background and early experiences, arrive at school with less prior learning, a more limited vocabulary and less advanced intellectual development.

Grouping them with other similar children and expecting less of them quickly becomes a self-fulfilling prophecy. There is powerfully persuasive evidence, from a variety of research studies, that ability grouping seriously restricts the education of children in the lowest tracks without conferring any great benefit on those in the highest track.

In his book *A Place Called School*, reporting the findings of a nation-wide detailed study of more than 1,000 American classrooms, John Goodlad of the University of California sums up the consequences of ability grouping this way: "Since those comprising each group are taught as a group most of the time, it is difficult for any one child to move ahead and catch up with children in a more advanced group, especially in mathematics. It is not uncommon for a child in the most advanced group to have progressed five times as fast as a child in the least advanced group over the course of a year....By the fourth grade, children at the top and bottom differ in

overall scholastic achievement, as measured by tests, by the equivalent of four full grades. In reading, this spread often is as much as six grades."⁷⁶

Similarly, in reviewing the findings of all available research regarding the effects of ability grouping, Dominick Esposito of Columbia University Teachers College concludes: "Homogeneous ability grouping as currently practised shows no consistent positive value for helping students generally, or particular groups of students, to achieve more scholastically or to experience more effective learning conditions. Among the studies showing significant effects, the slight gains favoring high ability students are more than offset by evidence of unfavorable effects on the learning of students of average and below average ability, particularly the latter....In a very real sense, the extent to which the current practice of ability grouping is permitted to exist in public schools represents the extent to which professional educators and governmental agencies sanction sub-quality education in a setting that is charged with the responsibility of developing each child to his fullest."⁷⁷

And Yehezkel Dar of the Hebrew University of Jerusalem, commenting on the findings of international research regarding the practice, states: "Ample research on the effects of separation by learning ability has failed to show any consistent educational advantage. In fact, research has disclosed that it has a negative scholastic and social effect upon students in the lower tracks and, as well, perpetuates cultural, ethnic and social divisions."⁷⁸

Ironically, ability grouping also fails to meet the objective of maintaining or bolstering children's self-esteem.

As educational psychology professors Barry J. Wilson and Donald W. Schmits of the University of Northern Iowa point out: "The fact that students are grouped by ability may be disguised (e.g., reading groups may have names like 'Bluebirds,' 'Robins,' and 'Chickadeees'), but even first-grade children quickly learn which groups are 'smart' and which is 'retarded.'" ⁷⁹

Summarizing the findings of his own and other studies, Goodlad reports: "This research shows also that children performing in the bottom group, whether or not regularly promoted to the next grade, show up less well on indices of both personal and social adjustment. They are the students most likely to perceive themselves as not doing well in school or having high expectation of further failure, and most likely to want to quit." ⁸⁰

Because it so clearly perpetuates rather than remediates the disadvantages with which some children arrive at school, the practice of consistent homogeneous ability grouping can no longer be justified in a system of education committed to achieving successful outcomes for all students.

It is therefore recommended:

19. That the practice of homogeneous ability grouping for instruction in any subject be discontinued by all schools in Ontario and, if necessary to achieve this result, that it be expressly prohibited by the Ministry of Education.

3.) The Spiral Curriculum

Perhaps the clearest, and most troubling, manifestation of the current preoccupation with educational process rather than outcomes is the approach known as the spiral curriculum.

This approach, which permeates current elementary school teaching practices, is derived from the theories of cognitive psychology. Its essential premise is that, instead of solidly learning one thing and then going on to the next, children should be exposed to substantially the same material reintroduced and redeveloped at different levels of understanding year after year.

Whatever the theoretical benefits of such an approach, its practical consequence too often is a belief that the demonstrable learning of specific skills or the acquisition of specific knowledge can be postponed almost indefinitely.

If John can't perform a given arithmetical operation in Grade 3, under this approach, it doesn't mean he's falling behind and needs remedial attention; it just means he isn't ready, and will probably do better next time around, in Grade 4.

The trouble, of course, is that the Grade 4 teacher may say the breakthrough will probably come in Grade 5, and so on. At no specific point is anyone required to step in and give John whatever individualized attention it takes to bring him finally to a grasp of the subject matter.

To convey a sense of the effect this approach has on educational thinking, it is worth quoting at length from a recent article in the Federation of Women

Teachers' Associations of Ontario Newsletter entitled What Parents Are Asking About Primary Education.

To the question, "At which level should a child be able to write stories with correct spelling, grammar and punctuation?" the article suggests giving parents the following response:

"Grade level does not determine how much a child actually understands about print. Rather, it depends on his background experiences with print and amount of exposure he has had. Some children develop a curiosity about print and figure out how it works by age three, others not until eight or nine years. Some children see print valued a great deal by those around them, while others rarely see this. Some children are encouraged to experiment with print and others are not. Writing takes shape in relation to the amount of prior experience.

"If spelling is merely corrected for children, we deprive them of the opportunity of figuring out the phonetic features of our language. Instead, spelling is analyzed by teachers. We look at errors and try to infer what the child already understands and what he needs to know. Usually one new feature is addressed at a time. It is important to show children relationships between words and to help them classify words based on spelling and grammatical rules. These lessons are most meaningful if the words are taken from the student's own writing, because the child has already displayed a need to know these words.

"The ability to spell develops gradually as a child learns to read. The more printed words a child processes in the course of reading, the greater the number of word images stored in his memory bank for

retrieval during writing. It's a two-way process; reading helps writing and writing helps reading.

"The main purpose of writing is to organize thoughts, record ideas and convey meanings to others. Early writers find it difficult to focus on both the composition of ideas and spelling conventions simultaneously. Since the former is more difficult to acquire and more crucial, it is stressed initially. At this stage the teacher becomes the editor to help with spelling conventions, freeing the child to concentrate on the development of ideas. Gradually more responsibility for conventional spelling is given over to the child. Throughout the entire process, however, children are made aware that final copy of writing must be accurate before it is presented to an audience.

"We must always remind ourselves that spelling is a means to an end, not an end in itself. It helps ensure that our ideas are conveyed to others, clearly and efficiently. Celebrate the ideas in your child's writing initially! In this way your child will be encouraged to keep writing."⁸¹

The careful reader will note that nowhere in this maze of verbiage is the initial question - "At which level should a child be able to write stories with correct spelling, grammar and punctuation?" - ever answered.

Or, rather, it is answered all too clearly by implication: At no particular level. Everything is relative. So if your child - whether in Grade 3 or in Grade 7 - can't spell and is writing ungrammatical gobbledygook, don't worry about it, everything will work out.

No wonder parents are frustrated! And no wonder students are turning up in high school unable to write coherently, to read at grade level, or to perform simple mathematical operations!

It would be tempting, but unfortunately inaccurate, to believe that such extreme relativism must be the exception rather than the norm. Quite the contrary, it is this pervasive relativism that explains the puzzlement - described in Part One of this report - of leading Ontario educators when they are asked what specific knowledge and skills a student would miss acquiring if he or she dropped out in Grade 10 instead of completing Grade 12. "It all depends," is the reply.

This relativist, unfocussed approach built around the spiral curriculum must be brought to an end.

There can be no meaningful pursuit of educational outcomes, no effective remediation to keep students from accumulating crippling deficits of knowledge and skills, and no real accountability within our system of education, until clearly defined learning objectives are established for every stage of the process.

If we are to have a system of education that genuinely gives equality of opportunity to all students and that results in the acquisition by all students of the knowledge and skills that they and our society need, then the management of the system will have to be refocussed around two fundamental questions: What should they know, and when should they know it?

There is no substitute for defining clear and specific educational outcome goals for each grade level of elementary school and then directing teaching practices toward the attainment of those goals.

It is only with reference to such goals that it is possible to identify at all stages the children who are encountering difficulties and need extra help, or, for that matter, to ascertain which teaching methods are effective and which are not.

Advocates of the current practices seem to perceive such a structured approach as somehow less caring or sensitive to the needs of children, even as downright harsh or repressive. It is difficult, after careful consideration, to understand this perception.

What is envisaged here does not involve turning the schools into joyless pedagogical sweatshops, or pressuring, berating or humiliating children who are having difficulty learning. Quite the contrary, it involves building on young children's natural love of learning by presenting a succession of clear attainable goals and giving all children all the necessary help to attain them, instead of leaving many children aware that they are falling further and further behind.

Children in Ontario have a shorter school year, a shorter school day and a less rigorous academic program than their counterparts in many other countries. The notion that they would somehow be damaged by the pursuit of more clearly defined learning outcomes appears peculiar as well as unfounded.

The approach envisaged here also should not be misconstrued as "back to the basics" in terms of substituting rote learning and mindless memorization for encouragement of creativity and understanding. Quite the contrary, creative thinking and problem-solving as well as effective learning techniques are among the essential skills on which the curriculum should focus, as discussed in Part One of this report.

At the same time, however, it does children no favor to believe that making school "fun" requires the avoidance of memorization work or of requirements for sustained periods of concentration.

As Northrop Frye, one of Canada's most eminent educators, puts it: "It seems to me that what is central about education is its continuity. That means there has to be a lot of learning by rote, like the multiplication tables and the alphabet. And a lot of drills seem tedious to a child, but nevertheless the child does build up certain skills. Like playing the piano or violin, you can't do it without practice and without drill."⁸²

It is also disconcerting to hear elementary school teachers explain that they have to keep moving quickly from activity to activity, instead of requiring any sustained concentration, because children brought up watching "Sesame Street" and other programs have short attention spans.

Six- or 7-year-old children are extraordinarily malleable. Catering to, and thereby reinforcing, their shortness of attention span does them a far greater disservice than a gradual but determined and unceasing effort to increase their capacity for sustained concentration.

The successor to the spiral curriculum envisaged here is an approach that embodies some of the key principles of mastery learning. This report does not go so far as to recommend that the specific Learning for Mastery approach developed by Benjamin Bloom and others necessarily be adopted as a whole, because that is a very rigid system and there is reason to be wary of replacing one rigid orthodoxy with another.

In place of the unfocussed spiral approach, learning should be seen as sequential, with the curriculum divided into manageable learning tasks or segments that a child must master before moving on to the next phase. At each point there should be instant feedback and correction; whenever a child encounters problems, he or she should be given whatever individualized help is needed to complete the learning task.

Some children move ahead with little difficulty under such an approach. Others need a modest amount of individualized attention to help them over various hurdles. And others still require considerable coaching and tutoring. But the risk of simply being left behind and accumulating an unmanageable deficit in knowledge and skills is greatly reduced.

As John Goodlad puts it: "Some advocates of mastery learning believe that the differences in individual learning rates can be eliminated. Provocative though this idea obviously is, it has, I believe, less practical significance for the next decade or so than the inherent concept of nearly all students being able to learn mathematics, science, social studies, and the rest if appropriate learning conditions are established. In the light of this proposition, we have barely begun the task of providing universal education...."⁸³

It is therefore recommended:

20. That the spiral curriculum approach be abandoned as an educational practice in Ontario elementary schools.

and

21. That in place of the spiral curriculum, educational policy in Ontario set clear and sequential outcome goals for each grade.

and

22. That within each elementary school grade the essential principles of the mastery learning approach be incorporated at least to the extent of treating learning tasks in each subject area as sequential, having students successfully master each task before moving on to the next, and providing students with whatever individualized help they may need to cope successfully with each such task.

4.) The Issue of Testing

If we are to reaffirm that a central purpose of our educational system is to bring every child to acquisition of the knowledge and skills we identify as essential, it follows inexorably that there must be some reliable way of knowing at various stages whether each

child is making satisfactory progress or needs additional help.

Teachers' evaluations, while important, are necessarily subjective. Even at their best, they can only identify the child's progress in terms of what and how that particular teacher is teaching.

A broader frame of reference is needed, and only testing can provide it. And because standards and expectations can vary widely from school to school and from school board to school board, while the knowledge and skills outcomes required are the same province-wide, it follows that testing will be most meaningful and useful if it is based on a uniform province-wide standard.

The current sampling approach used by the Ministry of Education does not suffice. Testing a limited sample of students may be useful in providing an overall sense of how well the system is functioning, but it does not meet the need for identifying each child's progress against an identifiable benchmark.

Because the purpose of testing should be diagnostic rather than in any sense punitive, it also would not suffice to test students at the end of elementary and/or secondary school. Rather, testing should take place at appropriate intervals during the schooling years, to establish whether each student is making satisfactory progress or requires remedial attention in one or more areas.

Elementary school pupils should have standardized tests in reading comprehension, writing (including grammar, spelling and punctuation), mathematics, reasoning and problem-solving, and learning

skills. In high school, students should be tested at an appropriate standard of achievement in at least these same areas, and preferably in the other subjects of a core curriculum as well.

The appropriate testing interval in elementary school might be every two years - that is, in Grade 2, Grade 4, Grade 6 and Grade 8. In high school, consideration should be given to administering provincially-standardized skills tests at the end of the second year or the beginning of the third, to allow ample time for remediation for those students who encounter difficulties.

Children whose performance on the tests indicates problems in one or more areas should promptly receive remedial attention, whether during school hours, after school, on weekends or in summer programs. And, of course, they should be retested at the end of remediation to ensure that they have in fact attained the necessary level of proficiency.

Critics of standardized testing worry that it may be too stressful, that children might be familiar with subject matter but be weak at writing tests, or that it would lead teachers to "teach the exam" instead of encouraging thought.

But since any sequential, mastery-type teaching approach must involve very frequent, casual tests and quizzes as an integral part of classroom activity, children should become sufficiently accustomed to writing tests that they would not find provincially-standardized ones particularly stressful. Similarly, if having their knowledge and skills tested were not such an unfamiliar and hence intimidating activity, children would be less likely to have problems with the testing process itself;

those who still did, could and should be helped to overcome their difficulties.

The possibility of "teaching the exam" does not appear to be a particularly acute concern when it is fundamental skills that are being tested. Teachers could teach the exam only by teaching children to read well, to write coherently and correctly, to perform mathematical operations accurately, to think clearly in solving problems and to learn effectively - and that, after all, is the whole purpose of the exercise.

As John Ricker, former dean of the faculty of education at the University of Toronto, puts it: "The oft-used argument that standardized tests will lead to teaching for the examination is not persuasive. Good teachers didn't and won't. Poor teachers may, but that might not be altogether bad."⁸⁴

There is compelling evidence of strong public support for a return to some form of standardized province-wide tests.

A 1984 survey of public opinions toward education in Ontario carried out by the Ontario Institute for Studies in Education found 66 per cent of respondents agreeing with "province-wide tests to assess the individual performance of high school students;" only 20 per cent disagreed. Among respondents identified as students, 67 per cent agreed.⁸⁵

A major survey carried out by Goldfarb Consultants for The Toronto Star in 1987 found at least equally high levels of support: 77 per cent of parents, 56 per cent of teachers, 64 per cent of high school students and 81 per cent of employers agreed that "there should be province-wide standards or tests so that



students can be evaluated according to the same standards."⁸⁶

It is also worth noting that, while it does not advocate a return to province-wide testing, the Ontario Secondary School Teachers' Federation acknowledged in its 1976 report, *At What Cost*, that when province-wide departmental exams were abolished, "Many positive aspects of the examinations were lost and never replaced: 1.)The examinations ensured that standards were established for each grade level in high school and even to some extent in elementary school. 2.)The clearly defined standards of the different grade levels helped the teacher-training institutions to prepare the type of teachers wanted and gave prospective teachers realistic job expectations. 3.)The examinations while providing a province-wide measure of the achievement of students also made a standard of comparison for schools and teachers. 4.)Post-secondary institutions and employers were more confident about the quality of the students who had been examined by departmental examinations in defined subjects."⁸⁷

It is therefore recommended:

23. That standardized province-wide tests at least in reading comprehension, writing (including grammar, spelling and punctuation), mathematics, reasoning and problem-solving, and learning skills, and in other core curriculum subjects in high school, be administered to all elementary and high school students at appropriate intervals throughout the years of schooling.

and

24. That such standardized province-wide testing be primarily diagnostic in purpose, leading to appropriate remedial initiatives for all students whose performance on the tests indicates difficulties in one or more areas.

5.) Social Promotion

The issue of social promotion is in some ways the most troubling one, because deciding what to do about it involves a choice between distinctly imperfect alternatives.

Social promotion - that is, the promotion of children from one grade to the next with their age group even if they are far behind most of the class in several subjects - is an attempt to spare children the stigma and emotional consequences of failure.

The practice is based on considerable research evidence that children who are held back a grade or more are more likely to drop out eventually, and that unsuccessful pupils who are promoted with their age group ultimately do somewhat better in school than similar pupils who are retained.

But the harsh reality is that neither group really does very well. Both the socially promoted and the retained tend to end up in the lower streams in high school, with a very considerable likelihood of dropping out or of graduating under-educated.

It is easy enough to understand why neither approach produces entirely satisfactory results.

On one hand, if a child has not learned successfully in a given class with a given teacher and given teaching methods, another year of more of the same - same teacher, same methods - will not necessarily address the fundamental learning problems. The pedagogical benefits may well be insufficient to offset the demoralizing effects of failure.

Retention without special and effective remediation, consequently, is not much of a solution - yet that is what most retention-versus-promotion studies tend to have to compare as one side of the equation.

On the other hand, there is nothing in social promotion to produce an improved learning outcome. Retention would normally be considered as an option in the case of a child with difficulties not in one but in several subjects - for instance, reading and writing and/or math. It is difficult to believe that in the next grade this child can simultaneously catch up in all the areas in which he or she was behind, and keep up with the rest of the class as it moves ahead; much more likely, he or she will keep moving from year to year with a large and growing deficit in knowledge and skills.

To some extent, this problem would be ameliorated by the mastery learning approaches recommended here and by recognition of the responsibility of teachers for bringing all their pupils to acquisition of specifically-required knowledge and skills. Constant monitoring of progress and recourse to early and effective remedial attention should significantly reduce the number of children who are far behind by the end of the year.

For children for whom this does not suffice, there should be remedial programs over the summer, with a view to enabling them to catch up sufficiently to be promoted to the next grade, with arrangements for additional remedial attention during the school year if necessary. An evaluation would be made at the end of the summer as to whether they have made sufficient progress to be able to keep up with the work of the next grade.

If any child were still far behind at the end of this remediation effort, whatever learning or developmental problem was causing the difficulties would scarcely be remedied by thrusting him or her into the next grade anyway. It would appear preferable on balance, as a last resort, to hold the child back a year - not simply for repetition of the same program in the same class, but for carefully-planned remedial teaching, preferably in a special remedial group with greater opportunity for individualized attention.

It is therefore recommended:

25. That automatic social promotion of children who are significantly behind grade level in learning accomplishment be replaced by enrollment in summer remediation programs, followed by evaluation as to whether sufficient progress has been made to enable them to keep up with the work of the next grade, with or without further remedial help during the school year.

and

26. That, as a necessary last resort, children who have not progressed

sufficiently in summer remediation to be able to keep up with the work of the next grade be retained for a year for further remediation, preferably in a special remedial group with greater opportunity for individualized attention than in regular classes.

5.) The Issue of Cost

Because an outcome-oriented approach to education for all children requires individualized help and/or remedial attention for those who encounter difficulties, there unavoidably are cost implications.

The costs need not necessarily be as great as might superficially appear, because there are alternatives to using comparatively highly-paid teachers for all the necessary activities.

Some of the individualized coaching and help could be provided by in-class peers who have a better understanding of a subject, by older successful pupils in the school, by parent volunteers, by teacher trainees or teaching assistants, by volunteers from the business community, or by high school or college students.

Alternatively, adult volunteers or paid staff below the level of professionally-trained teachers could be entrusted with more routine supervisory or teaching tasks - reading aloud to young children, to cite just one example - to free the time of expert teachers for individualized help or remediation.

Such approaches could reduce the need for incremental spending, but they would not eliminate it.

While throwing money at the education system would not in itself improve the quality of education, there is no escaping the reality that carefully-planned initiatives to implement a commitment to bringing about successful educational outcomes for all students will cost additional money.

Those costs will have to be weighed not only against the moral imperative to improve the workings of the system, but also against the costs - expenditures on unemployment insurance and welfare payments, foregone potential tax revenues from higher individual earnings, and all the costs of having an increasingly uncompetitive work force - that would result from continuing to have a high dropout rate and large numbers of young Ontarians deficient in necessary knowledge and skills.

IV. THE HIGH SCHOOLS

To restore meaning, purpose and equality of opportunity to high school education in Ontario, it is necessary to rethink the current practices that have eroded the commonality and universality of the high school learning experience.

The combined effect of streaming, proliferation of course choices under the credit system, and great differences from school to school in the content even of similarly named courses, has been to deprive young people in this province of a coherent and equitable system of secondary education with a discernible clarity of purpose.

1.) The Practice of Streaming

The practice of streaming students into advanced, general and basic levels can no longer be justified.

The evidence now is overwhelming that streaming is a social injustice, a theoretical error and a practical failure.

a.) Social Injustice

Streaming is socially unjust because of the compelling evidence - previously cited in Part Two of this report - of a close correlation between level of placement and the socio-economic status of students' families: the more socio-economically disadvantaged is a student's family background, the lower the stream in which he or she is likely to end up.

Being streamed into the basic or general program, in turn, sharply limits the content and quality of the education a student receives, and - because the lower streams have characteristics that significantly reduce their holding power - even reduces the likelihood that he or she will remain in high school until graduation.

This is largely because, from the outset, teachers have lower expectations for students in the general and basic streams. Coupled with the lack of clear purpose and intended knowledge and skills outcomes in the lower streams, those low expectations produce an unstimulating and therefore unsatisfying classroom environment that understandably leads many students to suspect that they are wasting their time.

In his study of American schools, John Goodlad found that high school streaming - practiced in a form virtually identical to ours under the name of tracking - produces striking differences in the quality of instruction students receive: "Students in the lower tracks were the least likely to experience the types of instruction most highly associated with achievement.... There were distinct differences favoring upper tracks in regard to teachers' clarity, organization and enthusiasm at both junior and senior high levels.... Teachers in the upper track classes definitely expressed more clearly their expectations for students, and they were perceived by students to be more enthusiastic in their teaching. If these characteristics are associated with enhanced learning, as research increasingly suggests they are, then students in our upper classes appear to be have been instructionally advantaged."⁸⁸

The most exhaustive report to date on streaming in the U.S. reaches unequivocal conclusions in this

regard. In her 1985 book *Keeping Track*, Dr. Jeannie Oakes of the University of California at Los Angeles concludes: "Tracking seems to retard the academic progress of many students - those in average and low groups. Tracking seems to foster low self-esteem among these same students and promote school misbehavior and dropping out. Tracking also appears to lower the aspirations of students who are not in the top groups."⁸⁹

In analyzing teaching practices in 297 classrooms in 25 schools across the the U.S., Dr. Oakes explains why this occurs: "We have seen that students in different groups were exposed to dramatically different qualities of knowledge. Decisions were made about the appropriateness of various topics and skills for students in different tracks which served to limit sharply what some students would learn. The lower the track, the greater the limits - quite different from any compensatory, or even democratic, intent....

"Very likely, these course-content choices were made in the same well-intended spirit as most tracking decisions. But what is determined to be best for students is often grounded not only in what appears to be the students' current levels of achievement - where they are now - but also in some assumptions about their educability - where they are capable of going....It does not take a giant leap in logic to conclude that students who are exposed to less quantity and quality of curricular content and classroom instruction will not have their academic achievements enhanced."⁹⁰

The Oakes study also raises a profoundly disturbing question as to the degree to which streaming has the effect, however unintended, of training young people from disadvantaged backgrounds not to aspire to higher socio-economic status for themselves:

"Could it be that we are teaching kids at the bottom of the educational hierarchy - who are more likely to be from poor and minority groups - behaviors that will prepare them to fit in at the lowest levels of the social and economic hierarchy? And, at the other extreme, are we teaching kids at the top of the schooling stratification system behaviors that are most appropriate for professional and leadership roles? In essence, are we teaching kids at the bottom how to stay there and kids at the top how to get ahead?"⁹¹

Before we respond that that may be happening in the U.S. but certainly not here in Ontario, it is worth pausing to consider what assumptions seem implicit in the goals set out for each of the three streams in the Ministry of Education's 1987 curriculum guideline for the teaching of high school English.

For the basic level: "Students should perceive the program as personally useful. It should provide them with a positive approach to employment and to leisure, and it should encourage their desire to learn."

For the general level: "The program addresses the need for students to read, write, listen, speak and view with confidence and clarity and to participate as thinking active and compassionate citizens in a democratic society. Communication skills are essential for success in the world of work, and aesthetic sensitivity is essential for personal satisfaction and enjoyment."

And for the advanced level: "Students taking advanced level courses should be encouraged to pursue academic interests and talents not only for their own personal development but also for the contributions that

their abilities will enable them to make to their communities and to society at large."⁹²

The progression is striking: "a positive approach" for basic-level students, "participation" and "success" for general-level ones, and "contributions to their communities and to society at large" for those at the advanced level. The conscious and intended assumptions are only about the intellectual abilities and potential of students in the respective streams, of course, but when one considers the direct correlation between streaming and socio-economic status, the implications for social justice of such a stratification of educational objectives become inescapable.

b.) Unsound Theory

The current practice of streaming is based on unsound premises on at least two counts.

It assumes that the necessary content of a high school education differs depending on whether a student's intended destination is the work force without further study, community college or university.

And it assumes that placement in the respective streams actually leads to those intended destinations after graduation - that basic students go into employment, that general students go to colleges of applied arts and technology (CAAT), and advanced students go to university.

Both assumptions are flawed.

In today's world, it makes remarkably little sense to say that a young person contemplating no further formal education needs less knowledge and fewer skills -

or even different knowledge or skills - than one going on to college or university.

If anything, the contrary proposition would be more persuasive. After all, the young person going on to post-secondary education will have further opportunities for directed and systematic learning, while his counterpart's capacity to contribute to the work place and to society at large will likely be determined by what he has learned in high school.

What appears most plausible is that the acquisition of knowledge and skills in the 12 educational content areas suggested in Part One of this report is needed equally by all our young people, regardless of their intended destinations.

The other defect of streaming based on intended destinations is that what is anticipated in theory simply isn't happening in practice.

Research by Dr. Alan King of Queen's University has established that of the students enrolled in the advanced stream in Grade 9, 30 per cent actually end up going to university and another 25 per cent go to community college. Only 12 per cent drop out of high school before graduation.

A scant 11 per cent of students enrolled in the general program in Grade 9 end up going to their theoretically intended destination, a CAAT, and less than half of these actually graduate from a college program. As discussed previously, fully 62 per cent of general students drop out of high school before graduation.

As for the basic program that is supposed to prepare students for the world of work, it is unlikely

that it succeeds in preparing most of them for anything - since a whopping 79 per cent drop out before graduation.⁹³

c.) Practical Failure

As the above figures demonstrate, streaming simply isn't working.

For most of the students enrolled in them, the two lower levels are not a path to any kind of academic success whatever, but rather a path to dropping out.

And even for the minority who do remain until graduation, the outcome of the diluted and largely aimless program in the lower two streams is a second-rate education that is likely to still leave them with significantly deficient knowledge and skills and with limited opportunities.

This manifest failure of two out of three streams cannot even be plausibly excused on grounds that the third stream, the academic, plays a vital role in enabling the most successful learners to obtain a better education than would result from sharing classes with students of varying degrees of ability.

As in the case of ability grouping in elementary schools, nothing in the body of international research supports a view that streaming in high school enables the brightest students to learn significantly more or better than they would in heterogeneous groupings.

Quite the contrary, as Dr. Oakes puts it: "What about those at the top? Given that they seem to have the best of what schools have to offer, wouldn't it follow

that their learning is enhanced by tracking ? Even though the research on academic outcomes and tracking is inconsistent in regard to high-track students, it does not appear that they do consistently better in homogeneous groups....The brightest and highest achieving students appear to do well regardless of the configuration of the groups they learn with."⁹⁴

This is explainable in part, according to the Oakes research, by the finding that there is no validity in "the assumption that the presence of low and average students in classes has the effect of diminishing the quality of classroom experiences. To the contrary, it appears that the presence of a number of the brightest students in class may raise the quality of both the content presented and the kinds of learning opportunities available to students of all types....(it is probably accurate) to suggest that classes in practice are geared to the highest level of students, not the lowest."⁹⁵

d.) Vocational Education

Any rejection of the credit system raises obvious questions about the future of vocational education in the high schools.

The answer appears to be that, despite the best intentions and some highly dedicated efforts on the part of vocational teachers, it is no longer realistic - or desirable - to expect high schools to train students for specific activities in the work place.

Technology is changing so fast that the schools have little hope of training students on up-to-date equipment. Training them with obsolete techniques on obsolete equipment is worse than useless.

It also appears undesirable to have high school students limit their future options at such an early age by channelling themselves into training for one specific type of work.

In place of such training - which the overwhelming majority of vocational students don't remain in school long enough to complete anyway - the schools would do better to provide all students with the fundamental, undifferentiated education described in this report.

Part of what takes place now under the guise of vocational training - and preferably including some school-supervised work experience - should be provided for all high school students as part of the Work in Society studies recommended to be one of the 12 essential content areas. The implementation of a well-planned program of such studies could engage the efforts of current vocational teachers as well as of guidance counsellors.

As a 1985 report of the Organization for Economic Cooperation and Development (OECD) puts it: "There is virtually complete agreement among OECD countries that education for working life, as provided within compulsory schooling, should not aim at preparation for specific occupations, but should be treated as part of general education and include teaching and guidance about working life and training requirements in different occupations, the way the labour market operates, collective bargaining, and the role of major industries in the national economy.

"Ironically, 'employable skills,' the ones commonly mentioned by those who argue that schools should prepare pupils better for working life, accord well with

what schools seek to develop anyway: literacy, an ability to communicate orally, numeracy, manual dexterity, an ability to cooperate with others, habits of hard work, not to speak of learning to learn. Independent critical thinking is also likely to make young persons valuable and productive."⁹⁶

e.) An Unsalvageable Failure

It would be unrealistic to hope that the failure of streaming can somehow be remedied by tinkering, by improving the content and the pedagogical practices in the two lower streams.

The defects of streaming are intrinsic and fundamental, and therefore unfixable by remedies other than abolition.

If all young people need the same foundation of knowledge and skills to be able to participate fully in the work place and in society at large, then a streaming policy designed from the outset to impart different levels of knowledge and skills to different groups of students cannot be rescued by improvements. And if the current advanced program represents even an approximation of the content and quality we believe are required for a first-class education, then placing young people in any other program necessarily consigns them to a second-class education.

In the U.S., where the debate on these issues is farther along than here, there is growing consensus

among the most thoughtful educators that streaming or tracking should be abolished outright.

"Putting students into boxes can no longer be defended," writes Ernest Boyer, president of the Carnegie Foundation for the Advancement of Learning. "The school program should offer a single track for all students, one that includes a strong grounding in the basic tools of education and a study of the core curriculum."⁹⁷

The Paideia Proposal, written by Mortimer J. Adler and 21 other leading American educators, states: "At the very heart of a multitrack system of public schooling lies an abominable discrimination. The system aims at different goals for different groups of children....The one-track system of public schooling that The Paideia Proposal advocates has the same objectives for all without exception."⁹⁸

Diane Ravitch, of Columbia University Teachers College, writes: "It is difficult for me to understand how a publicly supported school can justify providing one group of children with the equivalent of a prep school experience, another group with training for a trade, and a third group with preparation for nothing at all....The people who argue for curricular differentiation never submit their own children to the prescriptions they think appropriate for other people's children."⁹⁹

While there has not yet been intense debate on the issue in Canada, some thoughtful Ontario educators have begun to challenge the merits of streaming.

Thus, for instance, Jack D. Little, director of education for the Board of Education for the City of London, says: "Despite the requirements of Ontario Schools: Intermediate-Senior (O.S.I.S.), a legitimate

question may be raised as to the advisability of providing courses at three different levels of difficulty. The danger exists of students making decisions of life-long significance for inappropriate reasons at a highly emotional time in their lives."¹⁰⁰

Doing away with streaming must lie at the heart of any strategy to address the fundamental need for improvements in our education system, to significantly reduce the dropout rate in the long run, and to provide meaningful educational outcomes for all our young people. No recommendation in this report should be regarded as more important.

It is therefore recommended:

27. That the current policy of streaming high school students into academic, general and basic courses of study be abolished, and replaced by provision of a single and undifferentiated high-quality educational stream for all students.

It would be unrealistic, of course, to expect that all students in an undifferentiated program will attain the same level of achievement.

Some may attain a level of knowledge, proficiency and understanding represented by marks in the 60s, while others may achieve in the 80s or above. But all will be studying the same learning content and receiving the benefit of the same teaching techniques that our society judges to be the most necessary and appropriate. Their accomplishments, at whatever level of success, will therefore be more likely to be meaningful ones than is the case at present.

It should go almost without saying that this approach presupposes that weaker students will be given sufficient individualized help and/or appropriate remedial attention if they encounter difficulties, not merely abandoned to fend for themselves. By the same token, nothing in this approach should preclude encouraging the most gifted students to achieve beyond the formal requirements of a course by presenting them with stimulating research or project challenges.

Teaching techniques should take into account the diversity in students' learning styles, and should involve not only lectures but also coaching, small-group instruction and team learning assignments in which students of varying levels of ability work together on projects.

While the practice of streaming is so manifestly unjust and such an obvious failure that there is a strong sense of urgency about its abolition, the possibility exists that this abolition should take place only after a return to emphasis on educational outcomes in the elementary schools enables children to arrive at high school better prepared in terms of knowledge and skills.

Because so many students now in the later elementary grades would be subjected to the current unsatisfactory situation, that possibility is a highly unattractive one. If sufficient remedial services can be put in place in the high schools to help the weakest arriving students - or if intensive remediation can quickly be put into effect in the elementary schools, through summer programs if necessary - that would certainly be preferable to delay. If delay is deemed unavoidable, it should occur only on the basis of a clear

commitment to, and a specific timetable for, the abolition of streaming.

2.) The Credit System

Rooted in the "child-centered" educational theories of the Hall-Dennis Report, the credit system was brought into effect in the early 1970s to individualize high school education by letting each student quite literally design his or own learning program.

The retreat from this totally laissez-faire approach has been steady, though not necessarily orderly. A succession of adjustments imposed a requirement for three mandatory credits in 1975, nine in 1977 and 16 in 1984.

But emphasis on individual choice still remains the philosophical premise of the high school program, as stated Ministry of Education policy makes clear: "A secondary school program must be individually planned to reflect the developmental needs, motivation, career aspirations and ability of each student."

The current policy framework document, Ontario Schools: Intermediate and Senior Division, issued in 1984, encourages significant differences in program content not only from student to student but also from school to school: "It is considered appropriate, therefore, for each school to select its own program from amongst the various provincial guidelines and to develop its own courses of study based on these guidelines and local curricula to meet the needs, interests, and abilities of the students in its community."¹⁰¹

Accordingly, students are still left at present to choose nearly half their courses - 14 out of 30 credits - from a wide array of options that vary from school to school. And the academic calendars of some Toronto high schools offer a total of as many as 265 separate courses.

If a coherence of purpose is to be restored to our high schools, the belief that maximization of educational choice necessarily is a good in itself urgently needs to be rethought.

It is difficult to understand the validity of the widespread assumption that it is automatically "liberal" to give young people as much choice as possible in fundamental education, and illiberal, even reactionary, to accord priority to the pursuit of relevant educational outcomes for those young people.

We do not permit 15-year-olds in our society to vote, to drive a car, or to consume alcohol; if they commit what would otherwise be a criminal offence, we give them the special protections of the Young Offenders Act. We do all this in the conviction that adolescents in general cannot be expected to have the maturity and the experience to make sound judgments in crucial areas.

And yet, paradoxically, we have somehow convinced ourselves that we are doing those same young people a favor by leaving it largely up to them to decide for themselves - inevitably on the basis of inadequate prior knowledge and experience - what they need or

don't need to learn during those crucial high school years.

Given the degree to which those youthful educational decisions may determine the entire futures of these young people in an increasingly knowledge-intensive world, that is little short of an abdication of our responsibility as adults.

Although it was commenting at the time on a system even less structured than at present, a statement by the Ontario Secondary School Teachers' Federation in 1976 still has full application to our current situation: "Students have an obligation to study and prepare for adulthood. Adults in turn, from their experience, and in the case of educators their training, have an obligation to state clearly what this society needs and demands as a basic secondary education for adolescents. To do less, to allow the present laissez-faire attitude to continue, is to court disaster."¹⁰²

Against this background, the appropriate question to ask is not whether curricular choice in the abstract is a good thing - that can only lead to sterile theoretical debates - but whether the current level of individualization under the credit system is successfully serving necessary pedagogical purposes.

The credit system as it currently functions does not, first of all, appear to play any crucially helpful role in keeping students in high school until graduation.

Of the cohort who started Grade 9 in Ontario in 1967 - before the credit system came into effect - 71 per

cent stayed in school until Grade 12; the comparable figure for the 1966 cohort was 70 per cent. But of the cohort who started in 1971, only 65 per cent remained until Grade 12; 66 per cent of the 1972 cohort did so. By the time of the 1976 cohort, the rate had only managed to climb back up to the initial 71 per cent maximum.¹⁰³ The retention rate to Grade 12 has increased steadily and significantly since then, but some experts attribute that more to rising levels of youth unemployment than to any workings of the credit system.

In fact, Dr. Alan King concluded in 1981: "One of the implicit purposes of the credit system was to sustain enrollments in secondary schools. The assumption was that the flexibility of the system would make it possible for the students to select courses in which they could be successful. This increase in success would encourage more students to remain in school longer and graduate. In practice, this was not proven to be the case. Shortly after the introduction of the credit system, the percentage of students who remained in secondary school to Grade 12 began to decline. This was not a problem specific to Ontario. It also occurred in other provinces such as British Columbia and Alberta. Ironically, the decline tended to occur in provinces employing some variant of the credit system and not in those using another form of school organization (as in Nova Scotia, Quebec).

"Proportionate enrollments to Grade 12 continued to decline until 1974, but in the last few years they have come back to a level nearly equal to the high of 1970. Of interest, although the percentage of students remaining to Grade 12 has grown steadily, the percentage of students who actually graduate from Grade 12 is still below the 1970 figure."¹⁰⁴

Against this background, the current credit system has a number of serious deficiencies:

a.) It leaves serious gaps in what students are required to learn. A credit apiece in Canadian history and Canadian geography are mandatory, for instance, but it is entirely possible for students to graduate from high school having studied absolutely nothing of world history or world geography.

b.) It leaves great disparities in what students actually study even in fields supposedly identified as essential. The mandatory learning requirements - limited as they are - specify only number of credits needed in a given subject rather than necessary program content or the level of knowledge or skills to be attained.

c.) By permitting virtually random choices of almost half the courses each student takes, it fragments and ultimately trivializes learning in high school, thereby squandering precious educational time in young people's lives. Studying an introductory bit of this subject and a bit of that one may produce a smattering of superficial knowledge useful in playing Trivial Pursuit - and it may undoubtedly whet some students' interest for further learning - but for many it is unlikely to lead to a real command or thoughtful understanding of anything.

d.) To the extent that the proliferation of choice sends out a message that it doesn't much matter what students choose to study, it may also unintentionally send a message that it doesn't matter whether they stay and study anything at all. If school is perceived as entertainment at best, or pointless

busywork at worst, the temptation to go out into the workplace is understandably increased.

e.) The individualization of course choice may work to the detriment of students from less educated, lower socio-economic status households. While better-educated parents with high expectations are likely to advise and/or require their children to take courses that are relevant and beneficial, students from less supportive environments have a higher likelihood of drifting into whatever seems easy or fun.

f.) Indeed, if this report's recommendation that streaming be abolished were implemented but the current degree of course choice were maintained, it is likely that we would see the emergence of another form of streaming, with less advantaged students disproportionately ending up in certain courses.

g.) When the expectations of relatively unrestricted course choice created by the current system are frustrated, the result is often disgruntlement and cynicism toward the school. There appear to be frequent complaints by students that a course they wanted is full and they are forced to take some other unwanted and uninteresting subject instead, or that a course they want is available at some friend's school but not at theirs.

h.) By creating an element of competition among teachers for enrollment in their optional courses, the credit system can erode educational standards. Teachers know only too well that if word spreads that a given teacher is particularly demanding or assigns a great deal of homework, students are likely to avoid his or her classes.

i) The credit system may contribute to the dropout problem by discouraging students who fall behind in credit accumulation. If a student in fourth year knows that at the end of the year he will still be four credits short of the required 30 - or short one required credit in a mandatory subject he has previously failed - the temptation to just walk away is considerable.

j.) The individualized timetables required by the credit system make school a more alienating place as students move from class to class and teacher to teacher without being part of any cohesive social unit. It is entirely possible, under this system, for a shy or withdrawn adolescent to go right through the school year without getting to know a single person.

In view of all these deficiencies, it appears to make sense to move away from the current credit system. The primary objective should be not to remove choice but to restore purpose - but that, inevitably, would nevertheless require considerable reduction of the current range of choices in the curriculum.

If we agreed that every student in each year of high school should at a minimum study English (reading, writing, speaking and listening), mathematics, literature, history, geography, French, and science and technology, that alone would add up to seven courses - virtually the total current courseload.

Add a four-year sequence of courses in work in society and in the broad area of knowledge described here as citizenship, to say nothing of some programs in the arts and in fitness and health, and every student's schedule would already be overloaded - before any consideration were given to additional options.

An argument can certainly be made that any student who took such a program, with the skills of clear thought and effective learning emphasized throughout, would not be missing out on any other subjects that are really necessary to a high school education. But because it may not be essential for separate courses in every one of the vital content areas to be given in all four years, some limited degree of choice need not necessarily be precluded.

A three-year-sequence in English skills (though emphatically not in literature) might be deemed to suffice, for instance. Similarly, students without a particular aptitude for higher mathematics might be able to reach a sufficient general level of proficiency in three years. Two years might well suffice as mandatory for the citizenship program, and a year for a broad introduction to the arts if we have strong earlier programs in the elementary schools.

There could be scope under such an approach, consequently, for students to have a few optional courses in Grades 11 and 12. Such options should, ideally, be limited in number and meaningful in value rather than merely providing "interest" or a respite from more demanding subjects. There might be merit in having the options provide additional in-depth learning in essential content areas - a two-year package of additional courses in science and mathematics, for instance, or in the arts, or in introductory study of a foreign language - rather than a scattering of more peripheral subjects.

It would also be reasonable to make the optional courses subordinate to achieving success in the core curriculum. If a student needed additional time or help to reach the necessary level of accomplishment in mathematics, for instance, or in writing, that would take

precedence over taking an optional course. He or she might take an extra remedial course in math alongside the regular course in third year, for instance, or it might be decided that reaching desirable proficiency would require him or her to devote additional time to the subject in fourth year instead of taking some other optional course.

Under the restructured approach envisaged here, it would be possible for students to remain in the same class together for most subjects, thereby providing each student with membership in a coherent social unit and ending one of the more alienating aspects of high schools under the credit system. If each class teacher were able to provide instruction in at least two subjects, it would also provide students with a link to at least one teacher who would have an opportunity to know them better through sustained classroom contact.

It is therefore recommended:

28. That the credit system be abolished or phased out and replaced with a common program of learning in the essential content areas for all students, with no optional courses in Grades 9 and 10, and with only a limited number of optional courses to the degree consistent with successful learning outcomes in the essential content areas in Grades 11 and 12.

and

29. That students remain together in a stable heterogeneous class grouping for most of their common subjects each

year, and that, if possible, the class teacher provide instruction in a minimum of two subjects to provide sustained teacher-student contact.

3.) Computers in the Schools

The importance of enabling young people to acquire computer literacy is already sufficiently recognized in the development of Ontario educational policy that it does not require extensive elaboration here.

It is worth remarking, however, that beyond this generalized objective of familiarizing students with the technology, computers appear to have a useful role to play in remediation at both the elementary and the high school level.

As Ford Foundation education expert Gordon Berlin reports: "By spending approximately 30 minutes per day in computer-assisted instruction, the average student effectively doubles the amount of drill and practice time spent during the year. Evidence from the Job Corps shows the supplemental use of computers can increase reading and math gains by approximately 50 per cent....A 1977 meta-analysis of computer-assisted instruction in elementary and secondary mathematics found that student achievement was raised from the 50th to the 60th percentile on national norms. A 1983 meta-analysis of 48 studies comparing computer-based with traditional instruction found that, in 39 cases, students instructed with computers scored higher on final exams and/or achievement tests; this was particularly true for students with below-average ability....

"Computer-based instruction provides a learning opportunity extremely sensitive to the learner's efforts; a student can master a new lesson every day or two, and see rapid progress. It demystifies the learning process and teaches the learning-to-learn skills so valued by employers."¹⁰⁵

It is essential, however, that any reliance on computers as a means of remediation - or, for that matter, of initial instruction - be subject to the caveat that computers are no substitute for human attention.

Because students at risk of dropping out are motivated to a considerable extent by a feeling that no one in the school cares about them, sending them to a computer terminal - by its very nature an impersonal, though individualized, means of instruction - could make matters worse if it is not accompanied by sustained, caring and supportive human contact.

It is therefore recommended:

30. That increasing use be made of computers for remedial instruction in the elementary and secondary schools, but only with the clear understanding that computers are not a substitute for - and should only be used in conjunction with - personalized and sustained remedial attention by a teacher.

4.) Part-time Work

It is a fact of life that a great many high school students today do part-time work during the academic year.

This is not necessarily undesirable in itself. There is some evidence that a modest amount of part-time work can provide an outlet for the impatience of adolescents to join the work force, while at the same time familiarizing them at least somewhat with the realities and expectations of the work place.

Extensive part-time work during the school year is highly undesirable, however. As stated previously in this report, research indicates that the dividing line is somewhere around 15 hours a week; the more hours in excess of that a student works, the greater the likelihood of academic difficulties and/or eventual dropping out.

Excessive part-time work would be even more incompatible with the kind of high-quality, outcome-oriented - and therefore challenging - education for all students recommended in this report.

But having our system of education resign itself to mediocrity, because anything more would compete with students' outside activities, emphatically is no answer. It was disheartening, during the work of this study, to hear some teachers say that there is no point in assigning homework or expecting students to complete projects, because those who are working part-time won't do it anyway and will drop out if pressed.

That sort of response, while well-intentioned, is self-defeating. If we lower - or fail to raise - educational expectations in order to avoid competing with students' part-time work, we are sending students an unmistakable message that the job is at least as valid a priority as the school work. If educators don't demonstrate unequivocal certainty that education should

be the most important priority for a student, why should the student have that certainty?

Three types of approaches seem appropriate.

First, high schools should take the initiative in making all students aware of the damage that excessive part-time work can do to their educational prospects. It might be appropriate to spell out in school codes of conduct what is regarded as an acceptable maximum of such work during the school year.

Second, it might be worthwhile to explore ways in which part-time work can be made complementary to, rather than competitive with, school activities. The New York City Dropout Prevention Program, for instance, has had some success negotiating joint programs with the business community whereby limited but meaningful part-time work related to their respective interests is provided for at-risk students in cooperation with the school - but their continuation in those jobs is contingent on maintaining satisfactory marks and attendance.

And, third, the business community - small businesses as much as large - should recognize its own responsibilities in this matter. It is socially irresponsible, and profoundly short-sighted, to employ students for long hours during the school year or to entice them to leave school with offers of full-time employment.

It is therefore recommended:

31. That high schools take a
pro-active role in making all students
aware of the damage that excessive

part-time work can do to their educational prospects, and that consideration be given to specifying in school codes of conduct the acceptable maximums of part-time work during the school year.

and

32. That high schools and/or boards of education explore the feasibility and desirability of cooperative programs with the business community to provide students who wish it with limited amounts of part-time work contingent on maintaining satisfactory marks and school attendance.

and

33. That the business community, and individual businesses of every size, recognize the short-sightedness and social irresponsibility of providing students with excessive part-time work during the school year or encouraging students to leave school for full-time employment.

5.) Extra-curricular Activities

Extra-curricular activities of every kind - sports, drama, music, work on school yearbooks and newspapers, special-interest clubs, and so on - provide a vital dimension to the high school program.

In addition to developing the interests and skills of students, such activities provide an important sense of participation in the school community, a sense of "belonging" that can help to focus the attention of young people on school life. And, most important, they help to make school fun - a quality that every school, in addition to its academic endeavors, vitally needs to possess.

Unfortunately, the students who would probably benefit most from the sense of involvement that extra-curricular activities provide - students from socio-economically disadvantaged backgrounds and those with academic difficulties - are those who tend to participate the least. Far from regarding extra-curricular programs as frills, consequently, all schools should make an effort to encourage and persuade students to participate.

It is therefore recommended:

34. That the full-range of extra-curricular activities continue to be recognized as a vital element of the program rather than a frill in all high schools, and that high schools make an active effort to encourage the participation of all students in such activities.

6.) The Duration of Schooling

In principle, it would be logical in the light of all the considerations outlined in this report to conclude that the legal school leaving age should be raised from 16 to 18.

Permitting adolescents to limit their opportunities for the rest of their lives by deciding to leave school at 16 - an age at which they are most unlikely to have progressed beyond Grade 10 - is a real anomaly in a society that regards 16-year-olds as children for so many other legal purposes.

And yet it is an anomaly that cannot effectively be corrected by legislative means, tempting though it is to try to do so.

The problem is that mandatory attendance at school to the age of 18 would be virtually impossible to enforce. While many young people undoubtedly would comply voluntarily with such a law simply because they did not wish to be law-breakers, many others would not.

Enforcement measures directed against parents of adolescents in this age group would be ineffectual as well as unfair, because parents of 16- and 17-year-olds who choose to be rebellious do not always have a way of forcing them to comply. And enforcement measures directed against the dropouts themselves would be unlikely to have positive results: Bringing an already-alienated 16- or 17-year-old into court and threatening or imposing fines or detention is scarcely likely to make the adolescent less alienated or more enthusiastic about obtaining an education.

The objective, in any event, is not to hold unwilling adolescents prisoner in high schools, but to engage their commitment to completing their education in their own best interests. And that can only be accomplished by positive, not coercive, means.

It is therefore recommended:

35. That the legal school leaving age not be modified at this time, but that all participants in the system of education at every level be regarded as accountable for doing everything possible to motivate, encourage and assist all young people to continue in high school until graduation.

V. EDUCATION AND SOCIETY

While the accountability of the schools for their role in educating our young cannot be sidestepped simply by blaming any shortcomings on the state of society at large, it is also inescapably true that the schools cannot and should not be expected to function in isolation from the rest of society.

We all - parents, business, community organizations, labor unions and political decision-makers - have essential roles to play beyond watching from the sidelines and complaining about the quality of education.

By the same token, if they are to enlist the active participation of the rest of society in the educational endeavour, it is important for teachers and school administrators to recognize that they do not have a monopoly on educational wisdom and insights.

Children are best educated in an atmosphere of close cooperation between their parents and their school. But schools and individual teachers often demonstrate a certain ambivalence toward parental involvement.

It is all too easy for parents - especially those from lower socio-economic backgrounds - to become intimidated, uncomfortable or even unsupportive in their dealings with the school, if parental expressions of concern about teaching methods or a child's learning progress are too readily dismissed by teachers as uninformed or irrelevant.

While a great deal is already being done in this regard, all schools should further intensify their efforts to genuinely reach out to parents - especially to

those least comfortable in dealing with the schools - and to encourage their meaningful involvement as partners in the education of their children.

Because the business community has an enormous stake in the quality of graduates from our education system, it makes sense for businesses of every size to play a more active role in helping the schools to achieve the desired results. The same is true of labor unions.

While some valuable initiatives in this regard are already underway in various communities across Ontario, there is far more yet to be done. Businesses can make an enormously valuable contribution by providing volunteers and resources to the schools, by providing opportunities for students to become familiar with the world of work - and, perhaps most important, by working with the high schools to make remaining until graduation meaningful by ensuring the availability of an appropriate job for every graduate who is not going on to post-secondary education.

CONCLUSION:
REASSERTING THE RELEVANCE OF EDUCATION

Education is a subject on which everyone has an opinion, and one in which there are no perfect answers.

It is unavoidable, therefore, that everyone will find in this report something with which to disagree. It is to be hoped, however, that those areas of individual disagreement will not obscure debate on the fundamental premise from which these recommendations flow.

That premise is that we are failing at present to provide large numbers of young people with the education that they and our society need. We owe it to them, and to ourselves, to do better. We can do better.

We have tried, for the past two decades, to make education relevant to young people by letting them virtually design their own programs and by cramming the curriculum with courses intended to meet every kind of individual interest.

It manifestly hasn't worked, either in terms of making education seem sufficiently relevant to young people to keep enough of them in school until graduation or in terms of securing satisfactory pedagogical outcomes for those who do remain.

The approach proposed in this report proceeds from a different premise - that a relevant education is one that teaches young people what they need to know for effective participation in the work place and in society at large, in a rapidly-changing world.

What they need to know, and what inexperienced adolescents think they need to know, may be distinctly different. Trying to cater in high school to young people's perceptions of what is relevant - with courses in current events or pop sociology on one hand, or with training for specific jobs on the other - has turned out to be an exercise in futility, at least partly because those young people can clearly see that the resulting education is not respected or rewarded in the world beyond the school.

There is much more promise in defining as a society what our young people should learn by the time of graduation from high school, and then explaining to them with clarity and certainty of purpose why those areas of instruction are relevant.

A history teacher who cannot explain persuasively how the events of the past relate to our present and carry lessons for our future, should not be teaching history. The same is true of a mathematics teacher who cannot infuse his teaching with a sense of the role mathematics plays today in everything from assembly lines in the auto industry to running a business to the space exploration program. It is true, indeed, of every subject of instruction in the essential content areas.

Having a common and purposefully-focussed program of education would not mean that we must, or should, have monolithically uniform methods of instruction. The same learning content can be taught in many different ways, to appeal to students from different backgrounds and with different personal interests.

Even high schools with a consistent special emphasis in their optional courses, extra-curricular

activities and ways of approaching the essential content areas are not precluded by a pursuit of common necessary outcomes in terms of knowledge and skills. The same events and forces in history can be approached, for instance, in ways that appeal to the interest of some students in the arts, and of others in the sciences and technology. The same is true of mathematics or virtually any other subject.

As Ontario's deputy minister of education, Bernard Shapiro, has put it: "You can learn geometry just as easily with football as you can with building houses."¹⁰⁶

What is essential, as this report recommends, is that the necessary educational outcomes in terms of knowledge and skills for every student be clearly defined on a province-wide basis, and that school boards, schools and teachers be accountable for bringing those outcomes about, through whatever diverse teaching processes they choose.

The approach recommended here should also not be taken to imply, of course, that completion only of high school - even with the knowledge and skills outcomes described - can suffice to prepare young people optimally for adult life in the work force and in society at large. In an increasingly knowledge-intensive world, post-secondary education will become ever more important.

But the approach to elementary and secondary education recommended here can provide all young people with a solid foundation for further learning throughout their lives. And, unlike the current approach, it has the advantage of not giving a great many young people the message, at a very early age, that they lack what it takes to aspire to post-secondary education.

There is reason to hope that the kind of education envisaged in this report would be perceived by young people and adult society alike as relevant, because - far more than what is happening at present - it would be relevant.

SUMMARY OF POLICY OBSERVATIONS

1. Taking into account both the dropout problem and the very serious deficiencies of the "basic" and "general" streams of study, it may very well be that only the 52 per cent of young people who successfully complete the "advanced" stream are getting anything approaching an adequate high school education.

2. To approach the issue solely in terms of setting numerical targets and looking for ways to keep young people in school until graduation, would surely be to miss the point. Even if all our young people were to stay in school not only for 12 but for 20 years, we would nevertheless produce a generation of under-educated ignoramuses if that time were spent on ineffectual or irrelevant pursuits.

3. The career ladder has been truncated, and young people who start at the bottom with inadequate education and few skills will at best stay at the bottom, in low-paid, dead-end jobs. More likely, they will increasingly become altogether unemployable, as those marginal jobs steadily dwindle in number.

4. Education does not automatically result from warehousing young people in schools for any given number of years. That's merely schooling. Education, in the real sense that is vital to our society and to individuals for the reasons outlined above, can only be discussed meaningfully in terms of outcomes - in terms, that is, of the actual knowledge and skills acquired by students during the time they spend in school.

5. Graduation from high school serves, or should serve, as a certification that a given individual has attained at least a certain commonly-understood level of knowledge and skills. If that certification is not regarded as reliable - if people no longer understand what is being certified, or if large numbers of graduates prove deficient in the expected knowledge and skills - then the value of the high school diploma itself is eroded.

6. Education should be child-centered, in the sense of recognizing that the development of each individual child - each with his or her own predispositions, strengths and weaknesses, interests and learning styles - is the whole object of the exercise.

But it should at the same time be content-oriented, in the sense of recognizing that the whole object of the exercise is to develop each individual child by bringing him or her into possession of the specific knowledge and skills that every young adult coming into our society should have.

7. If we are to have a system of education that focusses meaningfully on intended outcomes for all students, therefore, the unavoidable first step is to make hard choices - to pare down the list of those intended outcomes to a manageable number that the schools can realistically be expected to bring about.

8. While the development of affective attributes is a necessary consideration in the educational process, it is not a sufficient one. Education should not be confused with group therapy. We ought no longer to shrink from reaffirming explicitly that education is ultimately about the acquisition of knowledge and skills.

9. There is little apparent logic in continuing the decentralization of curriculum planning that has characterized Ontario education in recent decades. In theory, this decentralization is intended to permit the content of education to be adapted to the differing needs of various communities across the province. But in reality, those needs do not differ in terms of content.

10. By putting strong emphasis on the acquisition of specific knowledge and skills only in the case of the university-bound, we as a society are paying only lip-service to the concept of universal public education. We are really saying, in effect, that we believe only a little more than half of our young people - those in the advanced-level high school program - are capable of benefitting from what we consider a genuine, full-scale education. For the rest, we have concocted a kind of educational placebo - two lower levels of diluted content, unclear purpose and inadequate outcomes - that enables us to pretend to ourselves that we are "educating" everybody.

11. There can be no effective pursuit of excellence in educational outcomes without meaningful accountability, and there can be no meaningful accountability without measurable standards of accomplishment.

12. It is a finding of this study that the high school dropout rate in Ontario, as precisely as it can usefully be identified, is between 31 and 33 per cent.

13. While various specifically targeted initiatives may be useful at the margins, it appears highly unlikely that a major reduction in the dropout rate can be accomplished by dropout prevention programs carried out in isolation from the rest of what is happening in our

system of education. What must be addressed, rather, are those structural and attitudinal characteristics of the education system itself that cause great numbers of young people to feel alienated, bored, rejected or unable to cope academically.

14. While only 12 per cent of students in the highest or Advanced stream leave school before graduation, the dropout rate is 62 per cent among students taking mainly General level courses and 79 per cent among students at the Basic level.

15. What seems abundantly clear is that instead of providing socio-economically disadvantaged children with genuine equality of opportunity by helping them to overcome their initial learning disadvantages, our school system at present has the unintended effect of relegating large numbers of these children to lower tiers of education characterized by low expectations and lack of clearly-defined intended outcomes, from which they are statistically unlikely to graduate and in which they will have learned comparatively little even if they do remain to completion.

16. The importance of school-related factors in the decision to drop out means that our current dropout rate does not exist simply because a certain proportion of students come from socio-economically disadvantaged homes, live with a single parent, are slow learners or have difficulty with English or mathematics. It exists because of what happens when those students come into contact with the high schools as they currently function.

17. Whether it takes visible forms or is more internalized, a sense of alienation appears to be the key factor in school-related decisions to drop out. Students are turned off by a sense that nobody cares, by the

impersonal and bureaucratic structures of today's large high schools, by the lack of a clear sense of purpose or intended outcomes in their programs of study, by the inconsistencies of a system that treats them as adults in some respects and children in others, by rules and disciplinary measures that they perceive as arbitrary or unfair, and by a perception that they are scorned or rejected rather than helped if they encounter serious learning problems.

18. The great risk inherent in a short-term dropout prevention strategy is that it might become a substitute for addressing the fundamental needs for improvement in our education system. To accept such a substitute, or even to delay addressing the fundamental issues in the name of first assessing the effects of dropout prevention initiatives, would be tragically myopic. It would be a disservice not only to the many students who would not be dissuaded from dropping out by special programs superimposed on current approaches, but also to graduating students who are receiving a less than optimal education and to our society as a whole.

19. As an absolute minimum, any serious attempt to reduce the alienation that is a major cause of dropping out must begin by providing every student with an assured and regular relationship with at least one caring adult within the school system.

20. If we are to have a system of education that genuinely gives equality of opportunity to all students and that results in the acquisition by all students of the knowledge and skills that they and our society need, then the management of the system will have to be refocussed around two fundamental questions: What should they know, and when should they know it?

21. If all young people need the same foundation of knowledge and skills to be able to participate fully in the work place and in society at large, then a streaming policy designed from the outset to impart different levels of knowledge and skills to different groups of students cannot be rescued by improvements. And if the current advanced program represents even an approximation of the content and quality we believe are required for a first-class education, then placing young people in any other program necessarily consigns them to a second-class education.

22. We do not permit 15-year-olds in our society to vote, to drive a car, or to consume alcohol; if they commit what would otherwise be a criminal offence, we give them the special protections of the Young Offenders Act. We do all this in the conviction that adolescents in general cannot be expected to have the maturity and the experience to make sound judgments in crucial areas.

And yet, paradoxically, we have somehow convinced ourselves that we are doing those same young people a favor by leaving it largely up to them to decide for themselves - inevitably on the basis of inadequate prior knowledge and experience - what they need or don't need to learn during those crucial high school years.

Given the degree to which those youthful educational decisions may determine the entire futures of these young people in an increasingly knowledge-intensive world, that is little short of an abdication of our responsibility as adults.

SUMMARY OF RECOMMENDATIONS

1. That the emphasis of educational philosophy in Ontario be shifted from process to outcomes, and that the objectives of education be defined in terms of the acquisition of specified demonstrable knowledge and skills by all children, through the application of pedagogical techniques appropriate to each child's needs.
2. That the essential content of education in Ontario for all students be defined in terms of the acquisition of demonstrable knowledge and/or skills in the following areas: English (reading, writing, speaking and listening); clear thinking and effective learning; mathematics; literature; the sciences and technology; Canadian and world history; Canadian and world geography; citizenship; work in society; French; the arts; and fitness and health.
3. That the Ministry of Education specifically prescribe program content and the necessary knowledge/skills outcomes on a province-wide basis, while delegating to local authorities the selection of pedagogical techniques for teaching that content and bringing about the prescribed outcomes for all students.
4. That it be made an explicit and vigorously pursued goal of education policy in Ontario to have all students, except those precluded by severe mental or physical disability, continue in high school until graduation.
5. That high-quality educational outcomes for all students and retention of all students in high school until graduation be seen as necessarily parallel and

complementary, not competing, objectives and that they be vigorously pursued simultaneously.

6. That the Ministry of Education proceed with any specific dropout prevention initiatives only on the understanding that they are a stop-gap measure to be undertaken strictly in conjunction with, and not as a substitute for, urgent progress in addressing fundamental issues in our elementary and secondary systems of education.

7. That the Ministry of Education conduct a major and sustained advertising campaign, using television and other media including posters in the schools, to emphasize to students and their parents the importance of remaining in high school until graduation.

8. That, in addition, all school boards be required to conduct advertising and communications campaigns urging parents to encourage their children to stay in high school until graduation and to contact the school if their children are contemplating dropping out or are experiencing other problems.

9. That all high schools in Ontario be required to assign every student to a teacher who will be responsible for monitoring that student's progress in all courses, for promptly identifying any signs of academic or personal difficulties, and for initiating interventions as appropriate to assist the student with any such difficulties.

10. That all high schools be required to provide regular weekly individual mentoring sessions with teachers at the very least for students whose background or academic characteristics indicate a risk of dropping out, and that mentoring also be provided to other

students to the maximum extent made possible by recourse as necessary to qualified mentors from the community at large.

11. That all high schools be required to provide high-quality remediation and tutoring services for students who are experiencing academic difficulties.

12. That consideration be given to contracting with community-based social service agencies to locate teams of appropriate professionals within high schools to provide troubled young people with ready access to services such as crisis intervention, family counselling, economic and social counselling, and help with psychological, emotional or medical problems.

13. That every school board be required to provide infant-care and child-care facilities for students in at least one of its high schools or - in areas where the need is insufficient to justify in-school facilities - to provide students with fully subsidized and accessible infant-care or child-care arrangements outside the school.

14. That all high schools be required to make contact, normally through the monitoring or mentoring teacher, with all students who drop out during the school year or who fail to return in the fall, in order to establish the reasons for their decision, to make a genuine effort to persuade them to reconsider and, if that fails, to explain the opportunities for return at a later date.

15. That all school boards in Ontario be required to provide universally available early childhood education in public and separate schools for children from the age of 3.

16. That the Government of Ontario provide appropriate financial assistance to the school boards for the provision of such early childhood education.

17. That the availability and importance of early childhood education be vigorously publicized to parents, with special efforts devoted to encouraging parents in the lowest socio-economic status groups to take advantage of this opportunity for their children.

18. That policies and practices in Ontario's elementary schools be founded on the premise that all children, except those with specific and insuperable mental or physical handicaps, can be brought to a common necessary level of knowledge and skills through the application of appropriate pedagogical techniques.

19. That the practice of homogeneous ability grouping for instruction in any subject be discontinued by all schools in Ontario and, if necessary to achieve this result, that it be expressly prohibited by the Ministry of Education.

20. That the spiral curriculum approach be abandoned as an educational practice in Ontario elementary schools.

21. That in place of the spiral curriculum, educational policy in Ontario set clear and sequential outcome goals for each grade.

22. That within each elementary school grade the essential principles of the mastery learning approach be incorporated at least to the extent of treating learning tasks in each subject area as sequential, having students successfully master each task before moving on to the next, and providing students with whatever

individualized help they may need to cope successfully with each such task.

23. That standardized province-wide tests at least in reading comprehension, writing (including grammar, spelling and punctuation), mathematics, reasoning and problem-solving, and learning skills, as well as in other core curriculum subjects in high school, be administered to all elementary and high school students at appropriate intervals throughout the years of schooling.

24. That such standardized province-wide testing be primarily diagnostic in purpose, leading to appropriate remedial initiatives for all students whose performance on the tests indicates difficulties in one or more areas.

25. That automatic social promotion of children who are significantly behind grade level in learning accomplishment be replaced by enrollment in summer remediation programs, followed by evaluation as to whether sufficient progress has been made to enable them to keep up with the work of the next grade, with or without further remedial help during the school year.

26. That, as a necessary last resort, children who have not progressed sufficiently in summer remediation to be able to keep up with the work of the next grade be retained for a year for further remediation, preferably in a special remedial group with greater opportunity for individualized attention than in regular classes.

27. That the current policy of streaming high school students into academic, general and basic courses of study be abolished, and replaced by provision

of a single and undifferentiated high-quality educational stream for all students.

28. That the credit system be abolished or phased out and replaced with a common program of learning in the essential content areas for all students, with no optional courses in Grades 9 and 10, and with only a limited number of optional courses to the degree consistent with successful learning outcomes in the essential content areas in Grades 11 and 12.

29. That students remain together in a stable heterogeneous class grouping for most of their common subjects each year, and that, if possible, the class teacher provide instruction in a minimum of two subjects to provide sustained teacher-student contact.

30. That increasing use be made of computers for remedial instruction in the elementary and secondary schools, but only with the clear understanding that computers are not a substitute for - and should only be used in conjunction with - personalized and sustained remedial attention by a teacher.

31. That high schools take a pro-active role in making all students aware of the damage that excessive part-time work can do to their educational prospects, and that consideration be given to specifying in school codes of conduct the acceptable maximums of part-time work during the school year.

32. That high schools and/or boards of education explore the feasibility and desirability of cooperative programs with the business community to provide students who wish it with limited amounts of part-time work contingent on maintaining satisfactory marks and school attendance.

33. That the business community, and individual businesses of every size, recognize the short-sightedness and social irresponsibility of providing students with excessive part-time work during the school year or encouraging students to leave school for full-time employment.

34. That the full-range of extra-curricular activities continue to be recognized as a vital element of the program rather than a frill in all high schools, and that high schools make an active effort to encourage the participation of all students in such activities.

35. That the legal school leaving age not be modified at this time, but that all participants in the system of education at every level be regarded as accountable for doing everything possible to motivate, encourage and assist all young people to continue in high school until graduation.

ENDNOTES

1. Stamp, Robert M., Ontario Secondary School Program Innovations and Student Retention Rates: 1920s - 1970s. Report to the Ontario Study of Relevance in Education and the Issue of Dropouts, September, 1987. Table 4.4, page 59.
2. Ontario Secondary School Teachers' Federation, Provincial Research Committee, At What Cost? A Study of the Role of the Secondary School In Ontario. 1976. Page 20.
3. Decima Research, A Report to the Ontario Study of the Relevance of Education and the Issue of Dropouts. September, 1987. Table 26, page 45.
4. The Toronto Star, Peterson calls for change to improve school system. March 4, 1987. Page 1.
5. Ontario: Ministry of Treasury and Economics, Ontario Study of the Service Sector. December, 1986. Page 18.
6. Carnegie Forum on Education and the Economy, A Nation Prepared: Teachers for the 21st Century. Report of the Task Force on Teaching as a Profession. May, 1986. Pages 13-14.
7. Ontario Study of the Service Sector, op. cit. Page 23.
8. Economic Council of Canada, Making Technology Work: Innovation and Jobs in Canada. 1987. Page 31.

9. The National Commission on Excellence in Education, U.S. Department of Education, A Nation At Risk: The Imperative For Educational Reform. 1983. Page 7.
10. Organization for Economic Cooperation and Development, Centre for Educational Research and Innovation, Governing Board, Transition to Adulthood. May, 1984. Page 61.
11. Ginzberg, Eli; Noyelle, Thierry, J., and Stanback, Thomas M., Technology and Employment: Concepts and Clarifications. Conservation of Human Resources, Studies in the New Economy. Westview Press. 1986. Page 54.
12. Ontario Study of the Service Sector, op. cit. Page 1.
13. Ibid., Background Notes. Page 11.
14. Bertrand, Olivier and Noyelle, Thierry, Changing Technology, Skills and Skill Formation: The policy Implications of the OECD/CERI Comparative Study of Financial Service Firms. A report to the Centre for Educational Research and Innovation of the Organization for Economic Cooperation and Development. October, 1986. Page 5.
15. Ibid., page 7.
16. Ontario Study of the Relevance of Education and the Issue of Dropouts, Benefits from Increased Education. Unpublished background study.
17. Decima Research, op. cit. Table 6, page 13.

18. Goldfarb Consultants, Student Retention and Transition in the Secondary Schools. A research report for the Ontario Study of the Relevance of Education and the Issue of Dropouts. September, 1987. Page 64.
19. Bertrand, O. and Noyelle, T., op. cit. Page 9.
20. Levin, H. and Rumberger, R., The Educational Implications of High Technology. Project Report No. 83-A4. Stanford University, Institute for Research on Educational Finance and Governance. 1983. (Quoted in Livingstone, D.W., Job Skills and Schooling: A Class Analysis of Entry Requirements and Underemployment. Canadian Journal of Education, Winter 1987. Page 25.)
21. Ravitch, Diane, The Schools We Deserve: Reflections on the Educational Crises of Our Time. Basic Books, New York. 1985. Page 39.
22. The Globe and Mail, Teaching of social skills in classroom becomes major challenge for schools. August 13, 1987. Page A19.
23. The Toronto Star, School system fails job market test most bosses report. May 9, 1987.
24. Humber College, Reading Skills of Humber College Freshmen. Unpublished.
25. Phillips, D. John, The School Leaver and the Outside World: What's Happening at the York Board of Education to Help Prepare Youth for the Working World. Education Canada, Fall 1984. Vol. 25, No. 3. Page 30.

26. Ontario Secondary School Teachers' Federation, At What Cost?, op. cit. Page 26.
27. Hall, Oswald and Carlton, Richard, Basic Skills at School and Work: The Study of Albertain. Ontario Economic Council, Occasional Paper 1. 1977. Page 258
28. Holmes, Mark, Ontario's Goals of Education: Obsolete and Obscure. Unpublished paper, 1985.
29. Ontario: Ministry of Education, The Formative Years. Circular P1J1. Provincial Curriculum Policy for the Primary and Junior Divisions of the Public and Separate Schools of Ontario. 1975. Pages 2, 5.
30. Ontario Secondary School Teachers' Federation, At What Cost?, op. cit. Page 34.
31. De Landsheere, Viviane, Minimum Competency in Secondary Education. Prospects, Quarterly Review of Education, UNESCO. No. 61, 1987. Pages 40-41.
32. The Toronto Star, School system fails..., op. cit.
33. Boyer, Ernest L., High School: A Report on Secondary Education in America. The Carnegie Foundation for the Advancement of Learning. Harper & Row, New York. 1983. Page 56.
34. Ontario: Ministry of Education, Curriculum Guideline, English. Intermediate and Senior Divisions. 1987. Page 2.
35. Boyer, op. cit. Page 111.
36. Quoted in Ravitch, op. cit. Page 131.

37. Ontario: Ministry of Education, The Formative Years, op. cit. Page 4.
38. Ontario: Ministry of Education, Curriculum Guideline, History and Contemporary Studies. Intermediate Division, Senior Division, Ontario Academic Courses. 1986. Page 5.
39. Goldfarb Consultants, op. cit.
40. Ontario: Ministry of Education, Education Statistics Ontario, 1985. Table 2.91, page 30.
41. Ontario Study of the Relevance of Education and the Issue of Dropouts, The Dropout Rate in Ontario. Unpublished background study.
42. Ibid.
43. Ontario Study of the Relevance of Education and the Issue of Dropouts, Education Status of the Ontario Population. Unpublished background study.
44. Porter, John; Blishen, B.R., and Barados, Maria, Survival of a Grade 8 Cohort: A Study of Early School Leaving in Ontario. 1977. Page 130.
45. Wright, E.N., The Retention and Credit Accumulation of Students in Secondary School. A Follow-up from the 1980 Grade Nine Student Survey. Toronto Board of Education, Research Service. May, 1985. Page 37.
46. Boyer, op. cit. Pages 244-245.
47. Porter, Blishen, and Barados, op. cit. Table 2.3, page 36.

48. Wright, op. cit. Page 23.
49. King, A.J.C., The Adolescent Experience. The Research Committee of the Ontario Secondary School Teachers' Federation. 1986. Page 63.
50. Ibid.
51. Wright, E.N. and Tsuji, G.K., The Grade Nine Student Survey: Fall 1982. Toronto Board of Education, Research Service. October, 1983. Table 34, Page 58.
52. King, The Adolescent Experience, op. cit. Page 60.
53. Oakes, Jeannie, Keeping Track: How Schools Structure Inequality. Yale University Press, New Haven. 1985. Page 40.
54. Watson, Cicely, Focus on Dropouts. Ontario Institute for Studies in Education. Page 38.
55. Galvin, Garrett, A Study of Student Retirement in Secondary Schools of the lakehead Board of Education, September 30, 1977 to January 31, 1979. Lakehead Board of Education. 1979. Page 82.
56. Reubens, Beatrice G., Secondary School Vocational Training in the United States. Paper presented in Modena, Italy, May 10, 1985. Conservation of Human Resources, Columbia University, New York. Page 14.
57. Watson, op. cit. Page 46.
58. Wright, op. cit. Table 7, page 17.

59. Warren, Wendy K., and King, Alan J.C., School to Work Study. The Provincial Research Committee of the Ontario Secondary School Teachers, Federation December, 1979. Table 11, page 26.

60. Rumberger, Russell W., High School Dropouts: A Review of Issues and Evidence. Review of Educational Research, Summer 1987, Vol. 57, No. 2. Table 3, Page 109.

61. Mills, Roger C., Relationship Between School Motivational Climate, Teacher Attitudes, Student Mental Health, School Failure and Health Damaging Behavior. Paper presented at the American Educational Research Association Annual Conference, Washington, D.C. April, 1987. Page 9.

62. Sinclair, Robert L., and Ghory, Ward J., Reaching Marginal Students: A Primary Concern for School Renewal. McCutchan Publishing Corporation. 1987. Pages 54-55.

63. Ibid. Page 56.

64. Wehlage, Gary G., and Rutter, Robert A., Dropping Out: How Much Do Schools Contribute to the Problem? Teachers College Record. Teachers College, Columbia University. Volume 87, Number 3, Spring 1986. Page 385.

65. Organization for Economic Cooperation and Development, Centre for Educational Research and Innovation, Education and Work: The Views of the Young. 1983. Page 14.

66. King, A.J.C., Secondary School to Work: Difficult Transition. Interchange, Vol. 11, No. 3, 1980-81. Page 50.
67. United States General Accounting Office, School Dropouts: The Extent and Nature of the Problem. Briefing Report to Congressional Requesters. June, 1986. Page 29.
68. Mann, Dale, Can We Help Dropouts: Thinking About The Undoable. Teachers College Record, op. cit. Page 313.
69. Wehlage and Rutter, op. cit. Pages 390-391.
70. Mills, op. cit. Page 12.
71. Boyer, op. Cit. Page 246.
72. Sinclair and Ghory, op. cit. Page 5.
73. New York City Dropout Prevention Program, New York City Board of Education, Guide to Materials. Page 11.
74. Schweinhart, L.J., and Weikart, P., The Promise of Early Childhood Education. Phi Delta Kappan. April, 1985. Page 552.
75. Adler, Mortimer J., et al., The Paideia Proposal: An Educational Manifesto. MacMillan Publishing Co. 1982. Page 45.
76. Goodlad, John I., A Place Called School: Prospects for the Future. McGraw-Hill Book Company. 1984. Pages 141-142.

77. Esposito, Dominick, Homogeneous and Heterogeneous Ability Grouping: Principal Findings and Implications for Evaluating and Designing More Effective Educational Environments. Review of Educational Research, Vol. 43, No. 2. Pages 171, 177.
78. Dar, Yehezkel, Teachers' Attitudes Toward Ability Grouping: Educational Considerations and Social and Organizational Influences. Interchange, Vol. 16, No. 2 (Summer 1985). Page 17.
79. Wilson, Barry J. and Schmits, Donald W., What's New in Ability Grouping?. Phi Delta Kappan. April, 1978. Page 535.
80. Goodlad, op. cit. Page 192.
81. Abbey, Sharon, What Parents Are Asking About Primary Education. FWTAO Newsletter. June, 1987. Page 4.
82. The Toronto Star, 'Key to education' is love of learning. May 10, 1987.
83. Goodlad, op. cit. Page 166.
84. The Toronto Star, We're all to blame for our schools. May 10, 1987.
85. Livingstone, D.W.; Hart, D.J., and Davie, L.E., Public Attitudes Toward Education in Ontario, 1984. Fifth OISE Survey. Ontario Institute for Studies in Education. Informal Series/62. Table 3.3, Page 26.
86. The Toronto Star, Test school system, taxpayers say. April 26, 1987.

87. Ontario Secondary School Teachers' Federation, At What Cost, op. cit. Pages 18, 20.
88. Goodlad, op. cit. Page 155.
89. Oakes, op. cit. Page 40.
90. Ibid. Page 192.
91. Ibid. Page 91.
92. Ontario: Ministry of Education, Curriculum Guideline, English...., op. cit. Pages 14-15.
93. King, A.J.C., and Hughes, J., Secondary School to Work: A Difficult Transition. The Research Committee of the Ontario Secondary School Teachers' Federation. 1985. Pages 12-14.
94. Oakes, op. cit. Page 194.
95. Ibid. Page 195.
96. Organization for Economic Cooperation and Development, Education in Modern Society. 1985. Pages 69-70.
97. Boyer, op. cit. Page 126.
98. Adler, et al., op. cit. Page 15.
99. Ravitch, op. cit. Pages 16, 313.
100. Little, Jack D., Extension 2001. Paper delivered to principals of schools in the Board of Education of the City of London. April, 1987. Page 7.

101. Ontario: Ministry of Education, Ontario Schools, Intermediate and Senior Divisions (Grade 7-12/OACs), 1984. Page 2.
102. Ontario Secondary School Teachers' Federation, At What Cost?, op. cit. Page 47.
103. King, A.J. C., and Hughes, J., op. cit. Page 9.
104. King, A.J.C., Secondary School to Work: Difficult Transition, op. cit. Page 45.
105. Berlin, Gordon, and Duhl, Joanne, Education, Equity and Economic Excellence: The Critical Role of Second Chance Basic Skills and Job Training Programs. Unpublished paper. 1984. Pages 45, 47.
106. The Toronto Star, Why not a school for jocks? May 10, 1987.